Government
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SESSIONAL PAPERS

VOLUME XLI.—PART VII.

First Session of Twelfth Legislature

OF THE

PROVINCE OF ONTARIO

SESSION 1909

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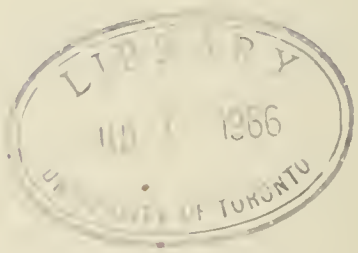

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No. 1.... Public Accounts of the Province, for the year 1908. Presented to the Legislature, 26th February 1909. *Printed.*

No. 2.... Estimates for the service of the Province until the Estimates of the year are finally passed. Presented to the Legislature, 17th February, 1909. *Not Printed.* Estimates for the ten months ending 31st October, 1909. Presented to the Legislature, 2nd March, 1909. *Printed.* Estimates (Supplementary) for the year 1909. Presented to the Legislature, 29th March, 1909. *Printed.* Estimates for the year ending 31st October, 1910. Presented to the Legislature, 29th March, 1909. *Printed.*

No. 3.... Report of the Minister of Lands, Forests and Mines of the Province, for the year 1908. Presented to the Legislature, 2nd April, 1909. *Printed.*

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No. 4.... Report of the Bureau of Mines, for the year 1908. Presented to the Legislature, 29th March, 1909. *Printed.*

No. 5.... Report of the Commissioners for the Queen Victoria Niagara Falls Park, for the year 1908. Presented to the Legislature, 26th February, 1909. *Printed.*

No. 6.... Report of the Minister of Public Works, for the year 1908. Presented to the Legislature, 19th March, 1909. *Printed.*

No. 7.... Report of the Registrar-General, relating to the Registration of Births, Marriages and Deaths, for the year 1907. Presented to the Legislature, 11th March, 1909. *Printed.*

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No. 8.... Report of the Temiskaming and Northern Ontario Railway Commission, for the year 1908. Presented to the Legislature, 26th February, 1909. *Printed.*

No. 9.... Report of the Ontario Railway and Municipal Board, for the year 1908. Presented to the Legislature, 30th March, 1909. *Printed.*

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No. 10... Report of the Inspector of Insurance and Registrar of Friendly Societies for the year 1908. Presented to the Legislature, 9th March, 1909. *Printed.*

No. 11... Financial Statements made by Loan Corporations, Building Societies, Loaning Land Companies and Trust Companies, for the year 1908. Presented to the Legislature, 9th March, 1909. *Printed.*

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No. 12... Report of the Minister of Education, for the year 1908. Presented to the Legislature, 17th March, 1909. *Printed.*

No. 13... Report of the Board of Governors of the University of Toronto, for the year ending 30th June, 1908. Presented to the Legislature, 26th February, 1909, *Printed.*

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No. 14... Report of the Ontario Agricultural College and Experimental Farm, for the year 1908. Presented to the Legislature 1st April, 1909. *Printed.*

No. 15... Report of the Ontario Agricultural and Experimental Union, for the year 1908. Presented to the Legislature, 1st April, 1909. *Printed.*

No. 16... Report of the Fruit Grower's Association of Ontario, for the year 1908. Presented to the Legislature, 2nd April, 1909. *Printed.*

No. 17... Report of the Fruit Branch of the Department of Agriculture, for the year 1908. Presented to the Legislature, 8th April, 1909. *Printed.*

No. 18... Report of the Ontario Vegetable Grower's Association, for the year 1908. Presented to the Legislature, 1st April, 1909. *Printed.*

No. 19... Report of the Entomological Society of Ontario, for the year 1908. Presented to the Legislature, 24th March, 1909. *Printed.*

No. 20... Report of the Ontario Bee-Keepers' Associations, for the year 1908. Presented to the Legislature, 1st April, 1909. *Printed.*

No. 21... Report of the Dairymen's Associations of Ontario, for the year 1908. Presented to the Legislature, 1st April, 1909. *Printed.*

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No. 23... Report on the Reforestation of Waste Lands in Southern Ontario, in 1908. Presented to the Legislature, 25th March, 1909. *Printed.*

No. 24... Report of the Women's Institutes of Ontario, for the year 1908. Presented to the Legislature, 26th February, 1909. *Printed.*

No. 25... Report of the Farmers' Institutes of Ontario, for the year 1908. Presented to the Legislature, 26th February, 1909. *Printed.*

No. 26... Report of the Agricultural Societies of Ontario, and the Convention of the Ontario Association of Fairs and Exhibitions, for the year 1908. Presented to the Legislature, 26th February, 1909. *Printed.*

No. 27... Report of the Horticultural Societies of Ontario, for the year 1908. Presented to the Legislature, 1st April, 1909. *Printed.*

No. 28... Report of the Bureau of Industries of Ontario, for the year 1908. Presented to the Legislature, 1st April, 1909. *Printed.*

No. 29... Report of the Inspectors of Factories of Ontario, for the year 1908. Presented to the Legislature, 1st April, 1909. *Printed.*

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No. 30... Report of the Bureau of Labour of Ontario, for the year 1908. Presented to the Legislature, 4th March, 1909. *Printed.*

No. 31... Report on Highway Improvement in Ontario, for the year 1908. Presented to the Legislature, 19th March, 1909. *Printed.*

No. 32... Report of the Game and Fisheries Department, for the year 1908. Presented to the Legislature, 25th March, 1909. *Printed.*

No. 33... Report of the Ontario Veterinary College, for the year 1908. Presented to the Legislature, 1st April, 1909. *Printed.*

No. 34... Report upon the Archives of the Province, for the year 1908. Presented to the Legislature, 6th April, 1909. *Printed.*

No. 35... Report on Neglected and Dependent Children in Ontario, for the year 1908. Presented to the Legislature, 30th March, 1909. *Printed.*

No. 36... Report of the Provincial Board of Health, for the year 1908. Presented to the Legislature, 16th March, 1909. *Printed.*

No. 37... Report of the Inspector of Division Courts, for the year 1908. Presented to the Legislature, 29th March, 1909. *Printed.*

No. 38... Report of the Inspector of Legal Offices, for the year 1908. Presented to the Legislature, 22nd March, 1909. *Printed.*

No. 39... Report of the Inspector of Registry Offices, for the year 1908. Presented to the Legislature, 6th April, 1909. *Printed.*

No. 40... Report of the Secretary and Registrar of Ontario, for the year 1908. Presented to the Legislature, 2nd April, 1909. *Printed.*

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No. 41... Report upon the Hospitals for the Insane of Ontario, for the year ending 30th September, 1908. Presented to the Legislature, 1st April, 1909. *Printed.*

No. 42... Report upon the Common Gaols, Prisons, and Reformatories of Ontario, for the year ending 30th September, 1908. Presented to the Legislature, 2nd April, 1909. *Printed.*

No. 43... Report upon the Hospitals and Charities of Ontario, for the year ending 30th September, 1908. Presented to the Legislature, 2nd April, 1909. *Printed.*

No. 44... Report upon the Operation of the Liquor License Acts in Ontario, for the year 1908. Presented to the Legislature, 26th February, 1909. *Printed.*

No. 45... Report of the Provincial Municipal Auditor, for the year 1908. Presented to the Legislature, 6th April, 1909. *Printed.*

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No. 46... A Return from the Records of the General and Subsequent Elections to the Legislative Assembly on the 8th day of June, 1908, shewing :— (1) The number of Votes Polled for each Candidate in each Electoral District in which there was a contest: (2) The majority whereby each successful Candidate was returned ; (3) The total number of Votes Polled ; (4) The number of Votes remaining unpolled ; (5) The number of names on the Polling Lists : (6) The number of Ballot Papers sent out to each Polling Place ; (7) The Used Ballot Papers ; (8) The Unused Ballot Papers ; (9) The Rejected Ballot Papers ; (10) The Cancelled Ballot Papers ; (11) The Declined Ballot Papers ; (12) The Ballot Papers taken from Polling Places ; (13) A General Summary of Votes cast in each Electoral District ; (14) A similar statement as to any Elections held since the General Election. Presented to the Legislature, 16th February, 1909. *Printed.*

No. 47... Report of the Librarian on the state of the Library. Presented to the Legislature, 17th February, 1909. *Not Printed.*

No. 48... Report of the Hydro-Electric Power Commission of the Province, for the year 1908. Presented to the Legislature, 7th April, 1909. *Printed.*

No. 49... Report shewing expenditure and account of Construction, Right-of-Way purchased and Equipment, owned by the Temiskaming and Northern Ontario Railway Commission. Presented to the Legislature, 12th March, 1909. *Printed.*

No. 50... Northwest Angle Treaty No. 3. Claims made by the Government of Canada, against Ontario. Presented to the Legislature, 6th April, 1909, *Printed.*

No. 51... Bulletin of the Toronto Hospital for the Insane in the interests of Psychiatry in Ontario. Presented to the Legislature, 12th March, 1909. *Printed for distribution only.*

No. 52... Copies of Orders-in-Council passed since the last Session of the Legislature under Section 27 of the Department of Education Act. Presented to the Legislature, 26th February, 1909. *Not printed.*

No. 53... Return to an Order of the House of the Third day of March, 1909, for a Return shewing :—1. The number of Public School Inspectors in the organized Counties of Ontario. 2. Number of Schools under Inspector. 3. The amount of money paid to such Inspectors. 4. The amount of money paid by the County as required by the Act. 5. Total amount of expenses paid by the Counties. 6. Average amount of salary and expenses paid each Inspector by both County and Government. Presented to the Legislature, 12th March, 1909. Mr. *Ferguson (Simcoe.)* *Printed.*

No. 54... Certain Agreements, made in duplicate, for the supply of printing paper required by the Government, for the term of three years, computed from the first day of January, 1909. Presented to the Legislature, 12th March, 1909. *Printed.*

No. 55... Copies of Orders-in-Council under the provisions of section 187 of "The Judicature Act," and sub-section 2 of section 84 of the "Surrogate Court Act." Presented to the Legislature, 12th March, 1909. *Not Printed.*

No. 56... Return to an Order of the House of the Third day of March, 1909, for a Return shewing :—1. The name of all the Collegiate Institutes, High Schools and Continuation Classes in the Province. 2. Which of these Schools were classed "Approved," in the Academic year, July, 1907, to July, 1908. 3. The change (if any) made in the classification of each such school since July 1st, 1908, to date. 4. The reasons for such change in classification. Presented to the Legislature, 25th March, 1909. Mr. *Stock.* *Not Printed.*

No. 57... Return of an Order of the House of the Fifteenth day of March, 1909, for a Return from the Master of Titles under the Land Titles Act for the last three years, shewing :—1. Number of absolute and qualified entries of ownership. 2. Number of possessory entries of ownership. 3. Amount added to the Assurance Fund. 4. Total amount of Assurance Fund. 5. The accumulated interest from time to time added. 6. Total losses charged against Insurance Fund. 7. Number of Transfers. 8. Number of Mortgages. 10. Number of leases. 10. Amount of Fees received. 11. Salaries and other expenses of Management. 12. Amount paid by the City of Toronto and County of York to make up deficits in running expenses during the last ten years. Presented to the Legislature, 29th March, 1909. Mr. *McPherson.* *Not Printed.*

No. 58... Report and Census on the Feeble Minded in Ontario. Presented to the Legislature, 6th April, 1909. *Printed.*

No 59... Statement of the distribution of the Revised and Sessional Statutes, 1897 to 1908. Presented to the Legislature, 31st March, 1909. *Not Printed.*

No. 60... Report of the Corn Grower's Association of Ontario, for the year 1908. Presented to the Legislature, 1st April, 1909. *Printed.*

No. 61... Report of the Department of Agriculture of Ontario, for the year 1908. Presented to the Legislature, 1st April, 1909. *Printed.*

No. 62... Report on Farming Opportunities in Ontario, with list of improved Farms for sale. Presented to the Legislature, 1st April, 1909. *Printed for distribution only.*

No. 63... Return to an Order of the House of the Nineteenth day of March, 1909, that the Report of Mr. Starr, who was appointed a Commissioner to enquire into certain matters relating to liquor licenses in the City of Toronto, which has not been printed for public distribution, the original Report be laid upon the Table of the House. Presented to the Legislature, 1st April, 1909. Mr. *Ross* (*Middlesex.*) *Not Printed.*

No. 64... Return to an Order of the House of the Tenth day of March, 1909, for a Return shewing :—Concerning each appointment made by the Government to any educational office, or employment, since the Government's inception of office. 1. Name of appointee. 2. Date of appointment. 3. Nature of employment or office. 4. Outline of duties pertaining thereto. 5. The salary paid. 6. If teacher, master or professor : (*a*) His academic standing. (*b*). The kind of school or schools in which his experience was obtained, and the length of it. (*c*) His professional status, and stating the kind of training school in which he was trained. 7. Concerning the office of Inspector since the creation of the office, and as to such official : (*a*) What previous experience in inspection had he. (*b*) His academic and professional standing qualifying him for his duties. 8. If not holding his engagement still, how was it severed. Presented to the Legislature, 1st April, 1909. Mr. *Stock. Not Printed.*

No. 65... Report upon the Hospitals for the Idiotic and Epileptic of Ontario for the year 1908. Presented to the Legislature, 1st April, 1909. *Printed.*

No. 66... Return to an Order of the House of the Fifth day of April, 1909, that the Report of the Commissioner who held the recent enquiry into the conduct of W. R. Andrews, the License Inspector of East Elgin, together with the evidence on which the same is based, be laid upon the Table of the House. Presented to the Legislature, 6th April, 1909. Mr. *Bowyer. Printed.*

No. 67... Return to an Order of the House of the Eighth day of March, 1909, for a Return shewing :—1. When a branch or sub-department of Forestry was established under the Government of Ontario. 2. The names and duties of all officials and employees of the said branch or sub-department in each year since and including the year 1905. 3. Name of any and all officials of the Government of Ontario whose duty it is to deal with forest conservation or re-forestation or either of them, together with a copy of the Orders-in-Council appointing said officials and copies of regulations defining their duties. 4. A statement, in detail, of the lands that have been set aside as forest reserves since the beginning of the year 1905, giving the location and acreage of each. 5. A statement in detail of the lands set aside for re-forestation since the beginning of the year 1905, giving the location and acreage of each. Presented to the Legislature, 6th April, 1909. Mr. *MacKay* (*Grey.*) *Not printed.*

No. 68... The James Bay Treaty, No. 9, with pay list for 1906. Presented to the Legislature, 6th April, 1909. *Printed.*

No. 69... Return to an Order of the House of the Fifth day of March, 1909, for a Return shewing :—1. How many licenses to operate motor vehicles in the Province was granted during the year 1908. 2. How many of these were granted to non-residents and how many to residents of this Province. 3. Were special Constables appointed by the Provincial Government to enforce the Motor Vehicle Law. If so, how many. 4. What expense in regard to their services or otherwise was undertaken by the Government in that regard. 5. How many convictions were made for breaches of the law. 6. How many were through the efforts of said Constables, if any. 7. What was the nature of the offences, and what number of convictions were secured under each. 8. What number of these convictions were against non-residents. Presented to the Legislature, 8th April, 1909. Mr. *Ross* (*Middlesex.*) *Not printed.*

No. 70... Return to an Order of the House of the Twenty-fourth day of March, 1909, for a Return shewing :—1. How many Emigrants the Salvation Army brought out from Great Britain and Ireland during the season of 1908. 2. How many were male and how many female. 3. How many were placed in the homes of the farmers of the Province of Ontario. 4. The names and addresses of the farmers, and if those so placed remained; how long, with names and addresses of any still remaining. Also, shewing :—1. How many Emigrants the Government of this Province brought out from Great Britain and Ireland during the season of 1908. 2. How many were male and how many female. 3. How many were placed in the homes of the farmers of the Province of Ontario. 4. The names and addresses of the farmers, and if those so placed remained, and if so, how long ; with the names and addresses of any still remaining. Also, shewing :—1. How many farmers the Government induced to come to the Province of Ontario during the year 1908. 2. How many rented, leased, or purchased farms. 3. How many are still on the farms, and if not, why. 5. Shewing any who took up government land, and if so, if they purchased it or acquired it on the homesteading plan. 7. The names and addresses of such farmers. Presented to the Legislature, 8th April, 1909. Mr. *Studholme. Not printed.*

ANNUAL REPORTS

OF THE

Live Stock Associations

OF THE

PROVINCE OF ONTARIO

1908.

Dominion Cattle Breeders' Association

Dominion Sheep Breeders' Association

Dominion Swine Breeders' Association

Ontario Poultry Associations

Provincial Winter Fairs

Ontario Horse Breeders' Association and Exhibition

(PUBLISHED BY THE ONTARIO DEPARTMENT OF AGRICULTURE, TORONTO.)

PRINTED BY ORDER OF

THE LEGISLATIVE ASSEMBLY OF ONTARIO

TORONTO:

Printed by L. K. CAMERON, Printer to the King's Most Excellent Majesty

1908

WARWICK BRO'S & RUTTER, Limited, Printers
TORONTO.

To the Honourable JOHN MORISON GIBSON, K.C., LL.D., etc., etc., etc.,
Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

The undersigned begs to present herewith for the consideration of His Honour the Reports of the Live Stock and Poultry Associations for 1908; also the Reports of the Provincial Winter Fairs, and of the Ontario Horse Breeders' Association, 1908.

Respectfully submitted,

JAMES S. DUFF,

Minister of Agriculture.

TORONTO, 1908.

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Dominion Cattle Breeders' Association.

ANNUAL MEETING.

The annual meeting of the Dominion Cattle Breeders' Association was held in the Palmer House, Toronto, on February 3rd, 1908, beginning at 2 p.m.

The President, John Gardhouse, was in the chair.

On motion, the minutes of the last annual meeting were taken as read, as they had already been published and distributed to members.

REPORT OF THE EXECUTIVE.

Ontario Pure Bred Stock Trade.—Owing to the largely increased population in Western Canada during the past few years, it will be well to consider whether or not the Ontario breeders are doing as much as they should to keep before the attention of new settlers and others residing in the West the quality of the Ontario stock, the values which can be procured, and the facilities for delivery through the Association cars. We wish to have an expression of opinion as to whether or not something might be done, in conjunction perhaps with the other Live Stock Associations in the Province, which will be of assistance to the pure bred stock trade of Ontario. The following points are suggested for discussion:—

1st.—The advantage of having display advertisements in the Agricultural and larger Provincial papers in the West.

2nd.—To arrange for a permanent representative in the West to act as a commercial agent representing Ontario breeders.

3rd.—To arrange for a car load of Ontario stock, including horses, cattle, sheep and swine, to be placed on exhibition next summer at as many fairs as possible throughout the West, including, of course, the Dominion Exhibition at Calgary early in July.

Shipments of Pure Bred Stock from Ontario to Western Canada.—During the year 1907 two long palace cars and four short cars were sent West with pure bred stock. The stock was collected from 70 breeders in Ontario and delivered at 72 points in the West between Fort William and Victoria. The first shipment started on March 11th and consisted of 10 horses, 6 cattle, 6 hogs and 8 sheep. The second shipment left for the West on April 25th, with 10 horses, 14 cattle and 11 hogs. The third shipment left on May 22nd and consisted of 9 horses, 8 cattle and 1 sheep. The fourth shipment started on September 17th and consisted of 5 horses, 15 cattle, 18 hogs and 6 sheep.

The following table shows the total receipts and expenses in connection with each one of the shipments:—

	Receipts.	Expenses.
Shipment of March 11th, long palace car	$341 27	$344 30
" " April 25th, 2 short cars	440 30	420 09
" " May 22nd, long palace car	341 41	331 35
" " Sept. 17th, 2 short cars	407 32	426 62
	$1,530 30	$1,522 36

The different breeds of stock were represented in these shipments by the following numbers:—

Breed.	Number in each shipment.				
	March 11th.	April 25th.	May 22nd.	Sept. 17th.	Total Number.
Horses—					
Clydesdales	8	10	7	2	27
Shires	2	.....	1	.....	3
Hackneys	.....	.....	1	.....	1
Cattle—					
Shorthorns	2	9	5	3	19
Hereford	.....	2	.....	.....	2
Aberdeen-Angus	.....	1	.....	.....	1
Holsteins	4	1	1	2	8
Ayrshires	.....	1	1	3	5
Guernseys	.....	.....	1	.....	1
Jerseys	.....	.....	.....	7	7
Sheep—					
Oxfords	8	.....	1	.....	9
Shropshires	.....	.....	.....	1	1
Leceisters	.....	.....	.....	4	4
Dorset Horns	.....	.....	.....	1	1
Hogs—					
Berkshires	6	7	.....	6	19
Yorkshires	.....	4	.....	9	13
Tamworths	.....	.....	.....	2	2
Essex	.....	.....	.....	1	1
Totals	30	35	18	41	124

In August of 1907 the rate on car loads of pure bred stock from Ontario to Pacific Coast points was reduced from $1.20½ per hundred pounds to 81½c per hundred. This reduction will mean much to breeders in Ontario who wish to sell stock in British Columbia and it is expected that considerable improvement will be noticed in the trade with British Columbia during the coming season.

Provincial Auction Sales of Cattle.—Provincial Auction Sales of Cattle were held during 1907 at Guelph, Port Perry and Ottawa, on February 27th, March 1st and March 8th, respectively. The following are the numbers of animals sold and the average prices at these sales:—

Guelph—

4 females sold for $260.00; average, $65.00.
52 males sold for $3,460.00; average, $66.54.
56 animals sold for $3,720. 00; average, $66.43.

Port Perry—

4 females sold for $244.00; average, $61.00.
19 males sold for $1,230.00; average, $64.74.
23 animals sold for $1,474.00; average, $64.09.

OTTAWA—

9 females sold for $680.00; average, $75.55.
17 males sold for $1,179.00; average, $69.35.
26 animals sold for $1,859.00; average, $71.50.

The Ottawa Sale for the present year was held on January the 24th. The Guelph and Port Perry Sales are advertised for March 4th and March 11th, respectively. The Ontario Department of Agriculture is arranging for the general advertising of these Sales, with the exception of the advertising in the local districts. In addition, the Department is undertaking to pay the freight on all animals purchased by residents in Ontario to the owners' stations in Ontario.

ONTARIO PROVINCIAL WINTER FAIR.

Breed.	Number of animals exhibited.			
	1904.	1905.	1906.	1907.
Beef Cattle—				
Shorthorns	33	27	25	23
Herefords and Aberdeen-Angus	17	24	19	13
Galloways and Devons	12	10	12	5
Grades or Crosses	37	38	38	22
Export Steers	21	15	18	12
Total	120	114	112	75
Dairy Cattle—				
Shorthorns	7	2	8	7
Ayrshires	2	14	17	14
Holsteins	15	15	6	12
Jerseys	4	7	7	.....
Grades	5	4	3	2
Total	33	42	41	35

The above table shows the number of head of cattle on exhibition for several years. In the Dairy Department there has not been much variation in the number of exhibits. In the Beef Cattle Department there was but a slight decrease in the number of exhibits between 1904 and 1906. In 1907 the number of beef animals was very small. It is often noticed at exhibitions that a class will be light one year without any apparent cause and correspondingly heavy the following year. There may be no reason so far as this exhibit is concerned for any special consideration being given to this matter, especially as the high prices and scarcity of feed would probably supply sufficient reason for a decrease in the exhibits if there was any special cause for it. It would be wise, however, to consider the classification for beef cattle carefully, to make sure that there is no deficiency which would be likely to adversely affect the beef cattle entries; also to see whether or not the list could be made sufficiently attractive not only to keep up the number of exhibits in the Beef Cattle Department, but to increase the exhibits and the number of exhibitors, by encouraging new exhibitors to enter into the contest.

Eastern Ontario Live Stock and Poultry Show.—The following statement shows the number of animals in the Beef Cattle and Dairy Cattle Departments at the Eastern Ontario Live Stock and Poultry Show at Ottawa, 1907; also the prizes offered in the different classes and the prizes paid:—

Class.	No. of animals.	Prizes offered.	Prizes paid.
Beef Cattle—			
Shorthorns	21	$217 00	$191 00
Herefords and Aberdeen-Angus	8	100 00	70 00
Galloways	5	100 00	70 00
Grades or Crosses	26	192 00	192 00
Export Steers	15	90 00	90 00
Total	75	$699 00	$613 00
Dairy Cattle—			
Shorthorns	2	$100 00	.....
Ayrshires	1	136 00	.....
Holsteins	4	200 00	$95 00
Grades	9	100 00	100 00
Total	16	$536 00	$195 00

National Live Stock Association.—A meeting of the Canadian National Live Stock Association is to be held at Ottawa on Wednesday, Thursday, and Friday, February 5th, 6th, and 7th. Two of the addresses, which will be of special interest to the members of this Association, will be those taking up "The best means of retaining for Canadian breeders the Canadian market for pure bred stock," and "Regulations governing the admission to Canada of pure bred stock." The representatives from this Association will have the opportunity of presenting to the convention the views of this Association, and instructions should be given regarding any of the matters which are on the programme, or others which it would be considered an advantage to have discussed by the Convention.

Referring to the subject regarding admission of pure bred stock to Canada, the following clause in the Report of the Executive was adopted by this Association last year:—

"It is recommended that this Association should take action to impress on the Dominion Government the importance of changing the regulations affecting the importation of live stock; to provide that stock must first be recorded in our books of record for the breed to which the animals being imported belong, and, if brought in for sale, must be imported and owned by a British subject residing in Canada before they are entitled to enter free of duty."

Canadian National Exhibition.—Owing to a change in the date of holding the annual meeting of the Canadian National Exhibition Association, it is necessary to send in the names of the representatives on or before the 15th of January of each year. As the annual meetings of the Live Stock Associations are not held until after this date, the delegates to this Exhibition Associations will now require to be elected for the following instead of current year. The delegates elected at the present meeting will be the representatives for 1909.

FINANCIAL STATEMENT.

Receipts.

Cash on hand from previous year, as per last report		$188 43
Membership Fees—		
General membership fees	37 00	
Canadian Hereford Breeders' Asosciation, 1906	31 00	
Aberdeen-Angus Breeders' Association, 1907	9 00	
Holstein Breeders' Association, 1907	100 00	
Ayrshire Breeders' Association, 1907	129 00	
Hereford Breeders' Association, 1907	17 00	
		$511 43
Total		

Expenditure.

Directors' fees and expenses		$22 44
Printing		16 00
Grants—		
Ayrshire Special Prize, Maritime Winter Fair	45 00	
Holstein-Friesian Special Prize, Winter Fair, Guelph	80 00	
Hereford Special Prize, Winter Fair, Guelph	14 00	
Ayrshire Special Prize, Winter Fair, Guelph	45 00	
Auditor	2 00	
Exchange	0 10	
		$224 54
Total		
Balance cash on hand Dec. 31st, 1907		$286 89

Examined and found correct this 31st day of January, 1908.

(Signed) J. M. Duff, *Auditor.*

John Gardhouse,
President.

A. P. Westervelt,
Secretary-Treasurer.

A. W. Smith spoke with regard to the clause referring to Ontario Pure-Bred Stock Trade. He did not favor either the first or the second suggestion, but thought that the third suggestion might well be acted upon, if the stock could be sold in the West after it was exhibited. He stated that buyers in the West were now desirous of seeing what animals were like before purchasing. John Bright also shared in this opinion.

R. H. Harding suggested that the Ontario Department of Agriculture should purchase the stock and sell it after it was exhibited.

Robert Miller opposed suggestions one and two, but favored the third suggestion. He said he would be glad to place an animal at the disposal of the Associations to assist in working out the scheme.

R. J. Mackie also made the same offer.

Considerable discussion took place with regard to the prizes and classification for beef cattle at the Provincial Winter Fair. Some of the members were in favor of having a larger classification so that each breed of beef cattle would have a class by itself. Others strongly advocated that all the pure-bred beef cattle should show together in one class. It was suggested that counties be allowed to offer prizes for county exhibits to encourage both old exhibitors and novices from the county giving the prize. It was

thought that it might also be well to have classes open to all amateurs; the amateurs to have their choice of showing in either the open or the amateur class. On motion, it was decided that the suggestion regarding amateurs at the Winter Fair be referred to the Winter Fair Board.

Moved by A. W. SMITH, seconded by R. J. MACKIE, "That suggestions one and two, under the heading, "Ontario Pure-Bred Stock Trade" be struck out and that the report of the Executive as thus amended be adopted." Carried.

Moved by R. H. HARDING, seconded by ROBERT SHAW, "That as it has been reported that the Canadian National Exhibition are considering a regulation requiring that live stock exhibits be kept on the grounds until Saturday night, the representative of this Association be instructed to oppose such a regulation." Carried.

OFFICERS FOR 1908.

President	JOHN GARDHOUSE, Highfield.
Vice-President	W. W. BALLANTYNE, Stratford.
Secretary-Treasurer	A. P. WESTERVELT, Toronto.

DIRECTORS.

Shorthorns	JOHN ISAAC, Markham. ARTHUR JOHNSTON, Greenwood.
Herefords	R. J. MACKIE, Oshawa. ALFRED STONE, Guelph
Aberdeen-Angus	A. MCKINNON, Hillsburg. J. W. BURT, Coningsby.
Galloways	ROBERT SHAW, Brantford. D. MCCRAE, Guelph.
Ayrshires	W. W. BALLANTYNE, Stratford. W. F. STEPHEN, Huntingdon, Que.
Holstein-Friesians	G. A. GILROY, Glen Buell. G. W. CLEMONS, St. George.
General Director	JOHN GARDHOUSE, Highfield.
Ontario Agricultural College	PRESIDENT G. C. CREELMAN. PROFESSOR G. E. DAY.

REPRESENTATIVES TO FAIR BOARDS.

Canadian National	JOHN GARDHOUSE, Highfield.
Central Canada	PETER CHRISTIE, Manchester. ROBERT NESS, Howick, Que.
Western Fair	CAPT. T. E. ROBSON, London. A. W. SMITH, Maple Lodge.
Provincial Winter Fair	ARTHUR JOHNSTON, Greenwood. JOHN BRIGHT, Myrtle. W. W. BALLANTYNE, Stratford. R. S. STEVENSON, Ancaster.
Eastern Ontario Live Stock and Poultry Show	THE PRESIDENT. J. H. GRISDALE, Ottawa. PETER WHITE, Pembroke. W. F. STEPHEN, Huntingdon, Que.

(A list of Members of the Dominion Cattle Breeders' Association is published in the Appendix to this Report.)

Dominion Sheep Breeders' Association.

ANNUAL MEETING.

The annual meeting of the Dominion Sheep Breeders' Association was held in the Palmer House, Toronto, on Tuesday, February 4th, 1908, at 1.30 p.m. The President, JOHN CAMPBELL, occupied the chair.

On motion, the minutes of the last annual meeting were taken as read.

PRESIDENT'S ADDRESS.

It is with much satisfaction we should this day deal with the requirements of this meeting of our Association. The past year has been one of unequalled prosperity in our business. Of late there have been some signs of disturbances, yet on the whole the sheep industry has been the most profitable of all the live stock branches in our Dominion. It is strange that with the flocks being the greatest profit yielders we do not produce enough sheep to supply the home demand at all seasons of the year. During each of the past two years, meat dealers in this City of Toronto have been obliged to import car loads of finished lambs from the United States to supply their customers. Is it wise on our part to miss supplying that demand, when the ruling prices paid have been the highest on record? Eight cents per pound and over, live weight, for the finished ten months old lamb is a price which should arouse greater interest in establishing and maintaining flocks in Canada. No other line of live stock, considering cost of production, can show as large a margin of clear profit as sheep do. Our pure-bred flocks have been doing as well for us as we could reasonably wish for. As an instance of values we notice the excellent average at public auction of a recent dispersion sale at Simcoe. It was one of the best in many years.

Another source of satisfaction is the healthy condition of our flocks, and further, while other stock suffered so severely the past season from lack of grass, our sheep and especially the lambs, have thrived better than usual. They have gone into winter quarters in better than average condition. Yet with all the brightness of recent years and certain good prospects for years to come, our people do not give the measure of attention to the industry which it is worthy of. When other lines of live stock husbandry have been fostered and encouraged by our Provincial Government, why has the industry we represent been treated with indifference? Largely by Government aid and indirect assistance, the bacon hog business has been proved a safe one to handle on nearly every farm. The dairy industry has been promoted by our Legislature for many years. Year by year the grant to it has been increased till now, practically one hundred thousand dollars annually is its cost to our Province, while on the other hand sheep breeders have not so far been able to get any encouragement to speak of. We cannot even get proper protection from the worthless curs which are so numerous, and which have driven sheep off many a farm. This should not be; if we rise in our strength and demand fair play we shall certainly obtain it, but we must work unitedly and not as partizans.

In conclusion allow me to refer to the high quality of our sheep when compared with those of other countries. When in competition at the International and other leading exhibitions our Canadian sheep take the lead in nearly every class and section. That does not happen by chance, and by having been repeated so many times it is now recognized all over the continent that in Canada pure-bred sheep, and sheep for the butcher's block are produced of such high quality and healthful stamina as to stamp them the best known.

REPORT OF THE EXECUTIVE.

The Executive submitted the following report:

Sheep Records. The following is a general statement as to the registrations of sheep in 1907:

	Registrations.	Transfers.	Duplicate Certificates.	New Certificates.	Ancestors.	Memberships (received at Ottawa).
January	159	18	..	..	390	$26 00
February	110	17	..	1	602	31 00
March	113	43	..	..	139	6 00
April	33	5	..	..	79	2 00
May	14	1	..	..	..	2 00
June	7	..	..	..	14	3 00
July	55	23	..	..	39	6 00
August	159	10	..	9	65	17 00
September	344	20	1	..	316	32 00
October	369	45	..	..	83	16 00
November	279	39	24	..	116	6 00
December	128	19	..	..	15	10 00
	1,770	240	25	10	1,858	$157 00

The statement of registrations according to the provinces is as follows:

	Registrations.	Transfers.	Duplicate Certificates.	New Certificates.	Ancestors.	Memberships (paid at Ottawa.)
Ontario	944	65	1	10	1,014	$75 00
Manitoba	11	7	..	..	33	3 00
Saskatchewan	9	2	..	..	13	3 00
Alberta	121	47	24	..	100	2 00
British Columbia	21	2	..	..	37	3 00
Quebec	645	115	..	..	639	69 00
New Brunswick	16	..	..	..	22	2 00
United States	3	2	..	..	..	....
	1,770	240	25	10	1,858	$157 00

The following is a list of pedigrees recorded from the time of commencing the Sheep Records in 1906, to December 31st, 1907:

Shropshires	1,905	Forward	5,342
Leicesters	2,562	Lincolns	189
Cotswolds	572	Hampshires	26
Dorsets	303	Oxford Downs	308
Forward	5,342		5,865

The monthly receipts on account of the Sheep Records at Ottawa are as follows:

January, 1907	$106 75	Forward	$371 45
February	141 00	August	148 10
March	31 25	September	204 00
April	3 75	October	224 35
May	18 10	November	213 30
June	14 10	December	73 75
July	56 50		$1,234 95
Forward	$371 45		

Although the financial statement shows a good balance on hand, no arrangement has been made regarding the publication of a volume containing copies of sheep pedigrees registered. Until this is done it will not be possible to know what the profits may be in connection with this Record. However, as the arrangement with the Quebec Association which was adopted at the last meeting, was that the memberships received from Quebec should be returned to that Association, it is recommended that the membership fees received from each Province should be returned to the Association looking after the sheep interests in that Province, with the understanding that the members from each Province should be members of the Provincial Association, without paying any additional fee.

The number of memberships received from each Province is as follows:

Ontario	145	British Columbia	4
Manitoba	4	Quebec	107
Saskatchewan	3	New Brunswick	2
Alberta	2		

Ontario Provincial Winter Fair. The following statement shows the number of entries in the classes for sheep at the Winter Fair at Guelph, 1907, together with the prize money offered in each class, and the amount paid:

Class.	No. of Entries.	Prizes Offered.	Prizes Paid.
Cotswolds	33	$175 00	$175 00
Lincolns	29	175 00	173 00
Leicesters	45	200 00	195 00
Oxfords	48	230 00	196 00
Shropshires	26	275 00	269 00
Southdowns	41	250 00	246 00
Dorset Horns	19	168 00	166 00
Hampshires and Suffolks	11	130 00	96 00
Grades or Crosses	50	240 00	240 00
	302	$1,843 00	$1,756 00

Eastern Ontario Live Stock and Poultry Show. The following statement shows the number of entries in the classes for sheep at the Eastern Ontario Live Stock and Poultry Show in 1907, the amount of prize money offered, and the amount paid:

Class.	No. of Entries.	Prizes Offered.	Prizes Paid.
Cotswolds	15	$89 00	$76 00
Lincolns	11	89 00	81 00
Leicesters	13	89 00	64 00
Oxfords	5	89 00	36 00
Shropshires	19	89 00	81 00
Southdowns	16	89 00	84 00
Dorset Horns	15	89 00	68 00
Hampshires and Suffolks	4	74 00	36 00
Grades and crosses	17	78 00	66 00
	115	$775 00	$592 00

Shipments of Pure-Bred Stock from Ontario to Western Canada.

(*See clause under this heading in the report of the Dominion Cattle Breeders' Association, page 7*).

Ontario Pure Bred Stock Trade. (*See clause under this heading in the report of the Dominion Cattle Breeders' Association, page 7*).

The Act for the Protection of Sheep and to Impose a Tax on Dogs. This Act has received considerable public attention during the last two years, and at the last Annual Meeting of the Association a revision of the Act was suggested, by which it was hoped to eliminate the weaknesses that had been pointed out in the various discussions.

The following are the principal changes suggested:

1. That the tax be $1 for one dog and $2 for each dog more than one, and that the tax for a bitch should be increased from $2 to $5.

2. That it should be compulsory upon each municipality to impose taxes on dogs.

3. That it should be compulsory upon each municipality to pay not less than two-thirds of the amount of damage done by dogs to sheep in cases where the owners of the dogs doing the damage cannot be found.

4. That the council of each municipality should at their first meeting each year appoint one or more competent persons to be known as Sheep Inspectors, whose duty it would be to inspect the injury done to sheep by dogs in cases where the owner of the sheep intends to claim damages from the council.

It would be well to have a discussion of the Act and decide what further steps should be taken with regard to it.

National Live Stock Association.—(*See clause under this heading in the report of the Dominion Cattle Breeders' Association, page 10*).

Canadian National Exhibition. (*See clause under this heading in the report of the Dominion Cattle Breeders' Association, page 10*).

FINANCIAL STATEMENT.

For the year ending December 31st, 1907.

Receipts.		Expenditures.	
Cash on hand from previous year, as per last report	$545 88	Directors' Fees and expenses	$ 22 65
Members' Fees	255 00	Printing	19 25
Registration Fees	1,077 95	Refund fees from Record Office	62 69
Interest	19 28	Expense of Delegate to Fair Boards	5 50
		American Shropshire Association Membership and Registration fees	288 50
		Auditor	2 00
Total	$1,898 11	Total	$400 59
		Balance cash on hand	$1,497 52

Examined and found correct this 31st day of January, 1908.

(Signed) J. M. Duff, *Auditor.*

All of which is respectfully submitted.

Signed on behalf of Executive,

John Campbell,
President.

Andrew Whitelaw,
Vice-President.

A. P. Westervelt, *Secretary-Treasurer.*

John A. Turner, Calgary, expressed the view that as this Association is a Dominion one, the people of Western Canada had not been given due consideration in the Report of the Executive. He also thought the Western Provinces should have representation on the Board. He opposed that part of the report dealing with the Pure-bred Stock Trade.

Several of the members took an active part in the discussion of this clause and it was finally decided on motion to adopt the first suggestion in the clause and strike out suggestions 2 and 3.

Moved by Lt. Col. R. McEwen, seconded by J. Lloyd-Jones,—"That further action with regard to the Act for the Protection of Sheep and to Impose a Tax on Dogs, be left to the Executi e." Carried.

On motion, the Report of the Executive as amended, was adopted.

Moved by L. Parkinson, seconded by James Bowman, "That the Winter Fair Board be requested to require that sheep exhibited at the Winter Fair must be owned by the exhibitor from the time of making entry instead of for three months previous to the Show." Carried.

Moved by J. G. Hanmer, and seconded, "That all pure-bred sheep shown at the Winter Fair should be registered in some recognized record for the breed and bear the Record Association ear label at the time of showing." Carried.

The Secretary was requested to try and secure the Prince of Wales prize for the Sheep Department at the Winter Fair. If it is secured the division of it is to be left to the Winter Fair Executive.

Moved by Lt.-Col. McEwen, seconded by Geo Telfer, "That the President, Vice-President, Wm. Dryden, Lt.-Col. McCrae, Lt.-Col. McEwen, and J. T. Gibson, be a committee to lay before the Minister of Agriculture and the Government the claim of the sheep industry for more government assistance." Carried.

J. Lloyd-Jones pointed out that in his opinion the principal cause for decrease in the number of sheep in Ontario is the insufficient protection given the industry by the Customs tariff.

After considerable discussion, it was moved by J. G. Hanmer, seconded by J. Lloyd-Jones, "That Lt.Col. McCrae, R. H. Harding, James Bowman, and J. M. Gardhouse, be a committee to lay before the Dominion Ministers of Agriculture and Customs the question of duty on wool and shoddy, and the claim of the sheep interests of Canada for more protection." Carried.

OFFICERS FOR 1908.

President	John Campbell, Woodville.
Vice-President	Andrew Whitelaw, Guelph.
Secretary-Treasurer	A. P. Westervelt, Toronto.

Directors.

Cotswolds	Lt.-Col. D. McCrae, Guelph.
Leicesters	Geo. Allison, Burnbank, Man.
Hampshires and Suffolks	John Kelly, Shakespeare.
Dorsets	R. H. Harding, Thorndale.
Southdowns	John Jackson, Abingdon.
Lincolns	Ernest Parkinson, Eramosa.
Oxfords	T. R. Arkell, Arkell.
Shropshires	John A. Turner, Calgary, Alta.
Ontario Agricultural College	Prof. G. E. Day, Guelph.
General Directors	W. H. Gibson, Beaconsfield, Que.
	A. W. Smith, Maple Lodge.
Representatives to Record Board	J. M. Gardhouse, Weston.
	R. H. Harding, Thorndale.
Representatives to National Live Stock Association	John Campbell, Woodville.
	Andrew Whitelaw, Guelph.

Vice-Presidents representing different Provinces.

British Columbia	A. C. Aitken, Duncan's, B.C.
Alberta	Bryce Wright, DeWinton, Alta.
Saskatchewan	Paul Brett, Regina, Sask.
Manitoba	A. G. Gamley, Griswold, Man.
Quebec	H. E. Williams, Knowlton, Que.
New Brunswick	T. A. Peters, Fredericton, N.B.
Nova Scotia	M. Cumming, Truro, N.S.
Prince Edward Island	Cephus Nunn, Winsloe Road, P.E.I.

Representatives to Fair Boards.

Canada National	Hon. John Dryden, Toronto.
	J. G. Hanmer, Brantford.
Central Canada	N. F. Wilson, M.P., Cumberland.
Western Fair	Lt.-Col. R. McEwen, Byron.
	Geo. Telfer, Paris.
Provincial Winter Fair	A. W. Smith, Maple Lodge.
	John Jackson, Abingdon.
	Lt.-Col. R. McEwen, Byron.
	Robert Miller, Stouffville.

Eastern Ontario Live Stock and Poultry Show	THE PRESIDENT.
	W. A. WALLACE, Kars.
	R. RICHARDSON, South March.
	N. F. WILSON, M.P., Cumberland.
Winnipeg Industrial Exhibition	W. L. TRANN, Crystal City, Man.
	GEO. ALLISON, Burnbank, Man.

EXPERT JUDGES FOR SHEEP FOR 1908.

COTSWOLDS: T. Hardy Shore, Glanworth; R. Miller, Stouffville; S. J. Lyons, Norval; Val. Fitcht, Oriel; Jas Underhill, Claremont; F. Bonnycastle, Campbellford; Prof. G. E. Day, Guelph; Geo. Green, Fairview; J. C. Snell, London; John Rawlings, Ravenswood; Wm. Thompson, Uxbridge; Jno. Park, Burgessville; Robert Vance, Ida; Geo. Laird, Guelph.
Judges nominated for Toronto: S. J. Lyons, Norval; Prof. G. E. Day, Guelph.
Judges nominated for London: S. Dolson, Alloa; Robert Vance, Ida.
Judges nominated for Chicago: Prof. G. E. Day, Guelph; Robert Miller, Stouffville.

LEICESTERS: R. J. Garbutt, Belleville; Jas Fennell, Bradford; H. B. Jeffs, Bond Head; A. E. Archer, Warwick; Geo. Whitelaw, Guelph; T. Hardy Shore, Glanworth; Abraham Easton, Appleby; E. Wood, Appleby; Wm. Parkinson, Eramosa; E. Parkinson, Eramosa; John Orr, Galt; Wm. McIntosh, Burgoyne; R. Eastwood, Mimico; John Kelly, Shakespeare; Andrew Thompson, Fergus; J. K. Campbell, Palmerston; J. C. Snell, London; G. B. Armstrong, Teeswater; Jno. Gibson, Denfield; C. E. Wood, Freeman; Jos. Gaunt, St. Helen's; J. M. Gardhouse, Weston; And. Whitelaw, Guelph, Wm. Whitelaw, Guelph; R. G. Martin, Marysville; A. W. Smith, Maple Lodge; H. G. Arnold, Maidstone; Prof. Craig, Ames, Ia.; John Marshall, Cass City, Mich.; J. W. Murphy, Cass City, Mich.; Prof. Curtis, Ames, Ia.; Geo. Penhale, Exeter; Prof. G. E. Day Guelph; M. Kennedy, Northwood; D. Lillico, Ayr; Jas. Douglas, Caladonia; Frank Shore, White Oak; John Gardhouse, Highfield; Wm. Beattie, Wilton Grove; A. J. McKay, Ailsa Craig; A. Hastings, Crosshill; J. Hastings, Crosshill; A. Deering, Crosshill; Jas. Snell, Clinton.
Judges nominated for Toronto: Prof. G. E. Day Guelph; (Reserve) J. M. Gardhouse, Weston.
Judges nominated for London: C. E. Wood, Freeman.
Judges nominated for Ottawa: Wm. Whitelaw, Guelph.

DORSETS: John Kelly, Shakespeare; Robert Miller, Stouffville; J. M. Gardhouse, Weston; Jno. Campbell, Woodville; J. G. Hanmer, Brantford; Prof. Curtis, Ames, Ia.; Thos. W. Hector, Springfield-on-Credit; G. P. Everett, Mt Vernon; H. N. Gibson, Delaware; E. O. Denton, Somerset, N.Y.; G. McKerrow, Sussex, Wis.; Jno. Jackson, Abingdon; Fred Silversides, Uxbridge; R. H. Harding, Thorndale.
Judges nominated for Toronto: John Campbell, Woodville; A. S. Forster, Oakville.
Judges nominated for London: J. G. Hanmer, Brantford; (Reserve) J. M. Gardhouse, Weston.

SOUTHDOWNS: John Jackson, Abingdon; W. H. Beattie, Wilton Grove; W. H. Gibson, Beaconsfield, Que.; N. H. Gibson, Deleware; Robert Miller, Stouffville; Geo. Telfer, Paris; J. G. Hanmer, Brantford; J. C. Duncan, Orchard Park, N.Y.; Robt. McEwen, Byron; H. L. Compton, Monroe, Ohio; Frank Klienhientz, Madison, Wis.; Prof. G. E. Day, Guelph; James Telfer, Paris; George Allen, Paris.
Judges nominated for Toronto: H. L. Compton, Monroe, Ohio.
Judges nominated for London: W. H. Beattie, Wilton Grove.

OXFORDS: Prof. G. E. Day, Guelph; John Harcourt, St. Ann's; Smith Evans, Guelph; Jas. Tolton, Walkerton; R. J. Hine, Dutton; Henry Arkell, Arkell; Wm. Dickson, Milday; J. H. Jull, Mt. Vernon; W. J. Arkell, Teeswater; Jno. E. Cousins, Harriston, Arch. McKenzie, Corwhin; R. E. Birdsall, Birdsall; J. C. Cooper, Picton; Wm. Newman, Cherry Valley; Wm. Arkell, Teeswater; L. Parkinson, Eramosa; S. C. Ketchen, Bloomburg; W. Lee, Simcoe; Prof. M. Cumming, Truro, N.S.; Walter Elliott, Kelso; J. E. Cerswell, Bond Head; Prof. R. Wade, O.A.C, Guelph; Jas. Thompson, Jr., Mildmay; A. Stevenson, Atwood.
Judges Nominated for Toronto: Prof. G. E. Day, Guelph; (Reserve) Prof. R. Wade, Guelph.
Judges nominated for London: J. E. Cousins, Harriston; (Reserve) J. E. Birdsall, Birdsall.
Judges nominated for Ottawa: Prof. H. S. Arkell, St. Anne de Bellevue, Que.

HAMPSHIRES AND SUFFOLKS: R. Gibson, Deleware; Henry Arkell, Arkell; W. H. Beattie, Wilton Grove; James Bowman, Guelph; John Kelly, Shakespeare; Geo. L. Telfer, Paris; Prof. G. E. Day, Guelph; H. N. Gibson, Deleware; W. H. Arkell, Guelph; W. R. Bowman, Mount Forest; Jno. Campbell, Woodville; R. J. Stone, Stonington, Ill.; J. Milton, Marshall, Mich.; Harry Thornton, Warren, Ind.; Frank Klienhiontz, Madison, Wis.

Judges nominated for Toronto: W. H. Beattie, Wilton Grove; Prof. H. S. Arkell, St. Anne de Bellevue, Que.

Judges nominated for London: Prof. G. E. Day, Guelph; Jno. Gibson, Denfield.

Judges nominated for Ottawa: John Campbell, Woodville.

LINCOLNS: John Gardhouse, Highfield; Leonard Parkinson, Eramosa; Robt. Robson, Ilderton; J. H. Patrick, Ilderton; E. Parkinson, Eramosa; Herbert Lee, Highgate; Prof. G. E. Day, Guelph; D. Campbell, Stratbburn; John T. Gibson, Denfield; Graham Walker, Ilderton; Wm. Oliver, Avonbank; John Mitchell, Glencoe.

Judges nominated for Toronto: John Gardhouse, Highfield.

Judges nominated for London: Herbert Lee, Highgate.

Judges nominated for Ottawa: Leonard Parkinson, Eramosa.

SHROPSHIRES: W. H. Beattie, Wilton Grove; R. Miller, Stouffville; J. G. Hanmer, Brantford; J. Campbell, Woodville; D. G. Hanmer, Burford; W. G. Pettit, Freeman; D. J. Campbell, Woodville; H. N. Gibson, Millbrook, N.Y.; Geo. Hindmarsh, Ailsa Craig; C. W. Gurney, Paris; J. Miller, Brougham; H. Hanmer, Burford; J. C. Duncan, Orchard Park, N.Y.; Prof. G. E. Day, Guelph; J. Shields, Caistorville; Geo. Crawford, Minesing; John Lloyd-Jones, Burford; W. D. Monkman, Bond Head; Will Dryden, Brooklin.

Judges nominated for Toronto: J. C. Duncan, Orchard Park, N.Y.; (Reserve) H. N. Gibson, Millbrook, N.Y.; (Reserve) W. H. Beattie, Wilton Grove.

Judges nominated for London: J. Shields, Caistorville; (Reserve) Geo. Hindmarsh, Ailsa Craig.

Judges nominated for Ottawa: D. G. Hanmer, Burford.

Judges nominated for Provincial Winter Fair: J. C. Duncan, Orchard Park, N.Y.; (Reserve) Prof. G. E. Day, Guelph.

Judges nominated for Dominion Fair, Calgary: MEDIUM AND SHORTWOOLS: J. C. Duncan, Orchard Park, N.Y.; (Reserve) Prof. G. E. Day, Guelph.

(A list of members of the Dominion Sheep Breeders' Association is published in the appendix to this Report).

Dominion Swine Breeders' Association.

ANNUAL MEETING.

The annual meeting of the Dominion Swine Breeders' Association was held in the Palmer House, Toronto, on Tuesday, February the 4th, 1908, at 2 p.m. The President, R. H. Harding, occupied the chair.

The minutes of the last meeting were taken as read.

DIRECTORS' REPORT.

The Secretary read the report of the Directors as follows:

The Directors of the Dominion Swine Breeders' Association beg to submit the following report:

SWINE RECORDS.—The number of pedigrees for the different breeds appearing in Volume 18 of the Record is as follows:

Berkshires	1,915	Tamworths	524
Yorkshires	3,333	Essex	2
Chester Whites	611	Duroc Jerseys	43
Poland Chinas	45		

The following is a general statement as to the registrations in 1907:

	Registrations.	Transfers.	Duplicate Certificates.	New Certificates.	Ancestors.	Books Sold.	Memberships (received at Ottawa).
January	428	43	4	4	2	..	$ 98 00
February	453	48	7	..	13	$4	110 00
March	447	80	13	..	..	4	98 00
April	532	43	3	..	13	..	78 00
May	478	40	..	2	1	..	74 00
June	571	45	2	6	9	..	76 00
July	684	44	..	1	5	..	90 00
August	635	38	5	1	21	..	74 00
September	680	75	1	1	2	..	64 00
October	408	55	2	3	1	..	26 00
November	559	34	4	1	2	..	26 00
December	402	49	..	2	4	..	20 00
	6,277	594	41	21	73	$8	$834 00

The statement of registrations according to the Provinces is as follows:

	Registrations.	Transfers.	Duplicate Certificates.	New Certificates.	Ancestors.	Members (paid at Ottawa).
Ontario	3,685	302	13	6	..	189
Manitoba	833	91	7	3	..	73
Saskatchewan	276	54	3	1	..	28
Alberta	194	14	2	3	..	22
British Columbia	102	11	..	..	10	10
Quebec	1,008	109	15	7	56	74
New Brunswick	99	1	..	..	7	7
Nova Scotia	22	..	1	..	..	2
Prince Edward Island	40	8	..	..	..	9
United States	18	4	..	1	..	3
	6,277	594	41	21	73	417

The monthly receipts on account of the Swine Records at Ottawa are as follows:

January, 1907	$394 30	Forward	$2,774 78
February	362 75	August	507 15
March	360 25	September	434 60
April	416 28	October	282 90
May	340 45	November	316 50
June	433 85	December	247 00
July	466 90		$4,562 93
Forward	$2,774 78		

Grants to Provincial Associations.—In accordance with the suggestion at the last Annual Meeting, the membership fees and profits from registrations for 1906 have been returned to the Provinces from which they originally came. The membership fees were returned to the Provincial Associations, with the understanding that these fees would pay the membership in the Provincial Association of the member who had joined the Dominion Swine Breeders' Association. The object in doing this was to assist the Provincial Associations in keeping up their memberships, through the Dominion Swine Breeders' Association.

Amounts paid to Provincial Associations out of profits on registrations and memberships, 1906:

Manitoba	$310 96	British Columbia	$ 44 09
Saskatchewan	95 15	Quebec	541 84
Alberta	64 22	Maritime Provinces	75 89

In addition to the amounts above referred to for 1906, there has also been returned to the Provincial Associations during the year the memberships for 1907. At the same time there has been sent to each Provincial Association a list of the members who have joined the Dominion Association from each Province, so that their names might be included in the membership of the Provincial Association.

Statement showing amounts refunded on account of 1907 memberships:

Province.	Paid before Dec. 31st, 1907.	Paid after Dec. 31st, 1907.	Total.
Manitoba			
Saskatchewan	$40	$12	$52
Alberta	42	8	50
British Columbia	10	10	20
Quebec	98	86	184
Maritime Provinces	26	10	36

The names of the Associations and the Secretaries to whom the money has been paid are as follows:

Name of Association.	Name of Secretary.
The Sheep and Swine Breeders' Association, of Manitoba	A. W. Bell, Winnipeg, Man.
The Saskatchewan Stock Breeders' Association	J. Breckin, Regina, Sask.
The Alberta Swine Breeders' Association	E. L. Richardson, Calgary, Alta.
The British Columbia Stock Breeders' Association	F. M. Logan, Victoria, B.C.
The Quebec Swine Breeders' Association	J. A. Couture, Quebec, Que.
The Maritime Stock Breeders' Association	E. B. Elderkin, Amherst, N.S.

Besides the memberships, the profits from registrations for 1907 amount to $1,000. According to the arrangement for the distribution of these profits and memberships, the different Provinces have been credited with the following amounts for 1907:

Province.	No. of Members.	No. of Registrations.	Amt. of Memberships.	Profits from Registrations.	Total.
Ontario	235	3,685	$470	$588 78	*$1,058 78
Manitoba	77	833	154	133 08	287 08
Saskatchewan	26	276	†52	44 09	96 09
Alberta	25	194	†50	30 99	80 99
British Columbia	10	102	†20	16 29	36 29
Quebec	92	1,008	†184	161 03	345 03
Maritime Provinces	18	161	†36	25 74	61 74

It is recommended that the amount for distribution in Ontario, $1,058.78, should be divided as follows:

1. That the Ontario Yorkshire Society should be paid the profits from Yorkshire registrations, amounting to $539.97.

2. That the Ontario Berkshire Society should be paid the profits from Berkshire registrations, amounting to $316.47.

*In addition to this amount, there was unexpended of the Ontario surplus $650.00 in 1906, $93.78 of which was spent in 1907, leaving the portion of the Ontario surplus unexpended, $556.22.

†This amount has already been refunded.

3. That the balance of the profits from Ontario should be paid in grants to Fair Associations as follows, on condition that the prizes for swine given by these Exhibitions in 1908 should be at least as large as in 1907.

Provincial Winter Fair	$75 00
Canadian National Exhibition	100 00
Western Fair, London	50 00
Eastern Ontario Live Stock and Poultry Show	50 00
Central Canada Exhibition	50 00

This money will be given with the understanding that the prizes for Yorkshire and Berkshire classes at these Shows should not be increased out of these grants.

SHIPMENTS OF PURE BRED STOCK FROM ONTARIO TO WESTERN CANADA. *(See clauses under this head in the report of the Dominion Cattle Breeders' Association, page 7.)*

ONTARIO PURE BRED STOCK TRADE. *(See clause under this head in the report of the Dominion Cattle Breeders' Association, page 7.)*

ONTARIO PROVINCIAL WINTER FAIR.—The following table shows the number of entries in 1907 in the different classes, together with the amount of prize money offered and won:

Class.	No. of Entries.	Prizes Offered.	Prizes Paid.
Berkshires	60	$176 00	$176 00
Yorkshires	41	209 00	209 00
Tamworths	33	176 00	176 00
Chester Whites	35	145 00	145 00
Grades or Crosses	42	120 00	120 00
Bacon Hogs	94	610 00	610 00
	305	$1,436 00	$1,436 00

EASTERN ONTARIO LIVE STOCK AND POULTRY SHOW.—The statement below shows the number of entries, the prizes offered, and the prizes won in each class of swine at the Eastern Ontario Live Stock and Poultry Show of 1907.

Class.	No. of Entries.	Prizes Offered.	Prizes Paid.
Berkshires	19	$84 00	$76 00
Yorkshires	22	84 00	84 00
Tamworths	15	84 00	82 00
Chester Whites	16	84 00	63 00
Grades or Crosses	20	84 00	80 00
Bacon Hogs	44	395 00	395 00
	136	$815 00	$780 00

NATIONAL LIVE STOCK ASSOCIATION. *(See clause under this heading in the report of the Dominion Cattle Breeders' Association, page 10.)*

CANADIAN NATIONAL EXHIBITION. *(See clause under this heading in the report of the Dominion Cattle Breeders' Association, page 10.)*

FINANCIAL STATEMENT.

For the year ending December 31st, 1907.

RECEIPTS.

Cash on hand from previous year, as per last report	$3,838 71
Membership fees	984 00
Registration fees	3,720 93
Interest	98 18
Books sold	8 00
Total	$8,649 82

EXPENDITURES.

Directors' expenses	$108 24
Expenses of delegates to Fair Boards	32 75
Balance of amount paid to Record Committee, 1906	181 21
Amount paid to Record Committee, 1907	1,200 00
Refund fees from Record Office	126 33
Printing and binding records	1,049 20
Printing	14 00
Grants.	
Manitoba	310 96
Quebec	639 84
British Columbia	54 09
Saskatchewan	135 15
Maritime Provinces	101 89
Alberta	106 22
Ontario—	
Large Yorkshire Breeders' Association	750 00
Western Fair, London	100 00
Central Canada Exhibition, 1906, 1907	250 00
Canadian National Exhibition, 1907	250 00
Winter Fair, Guelph, 1907	200 00
Auditor	2 00
Express	0 47
Total	$5,612 35
Balance cash on hand	$3,037 47

Examined and found correct this 31st day of January, 1908.

(Signed) J. M. DUFF, *Auditor.*

All of which is respectfully submitted.

Signed on behalf of the Directors.

R. H. HARDING, *President.*

D. C. FLATT, *Vice-President.*

A. P. WESTERVELT, *Secretary-Treasurer.*

Moved by J. E. Brethour, seconded by Douglas Thomson, "That the Report of the Directors be received."

Moved by Douglas Thomson, seconded by J. Lloyd-Jones, "That the word 'Ontario' in the heading 'Ontario Pure-bred Stock Trade,' be changed to 'Canadian'." Carried.

After discussing the various suggestions under this heading, it was moved by Douglas Thomson, seconded by G. B. Hood, "That suggestion two be struck out." Carried.

Moved by Wm. Jones, seconded by D. C. Flatt, "That suggestion 3 be struck out." Carried.

On motion the report of the Directors as thus amended, was adopted.

OFFICERS FOR 1908.

President	D. C. Flatt, Millgrove.
Vice-President	Wm. Jones, Zenda.
Secretary-Treasurer	A. P. Westervelt, Toronto.

Directors.

Berkshires	W. H. Durham, Toronto.
Yorkshires	J. E. Brethour, Burford.
Chester Whites	D. DeCourcey, Bornholm.
Poland Chinas and Duroc Jerseys	W. M. Smith, Scotland.
Tamworths	Geo. Douglas, Mitchell.
Essex	Jos. Featherston, Streetsville.
General Director	R. H. Harding, Thorndale.
Ontario Agricultural College,	Prof. G. E. Day, Guelph.

Representatives to Fair Boards.

Canadian National	D. C. Flatt, Millgrove.
	Samuel Dolson, Alloa.
Central Canada	R. O. Morrow, Hilton.
	R. J. Garbutt, Belleville.
Western Fair	Geo. Douglas, Mitchell.
	Douglas Thomson, Woodstock.
Provincial Winter Fair	Prof. G. E. Day, Guelph.
	G. B. Hood, Guelph.
	Wm. Jones, Zenda.
	R. H. Harding, Thorndale.
Eastern Ontario Live Stock and Poultry Show	D. C. Flatt, Millgrove.
	P. O. Collins, Bowesville.
	J. C. Smith, Hintonburg.
	W. H. McNish, Lyn.

EXPERT JUDGES FOR SWINE FOR 1908.

Berkshires: John Kelly; Shakespeare; J. J. Wilson, Milton; H. Mason, Scarboro; Adam Thompson, Shakespeare; James Hamilton, Shakespeare; Wm. Wilson, Snelgrove; J. C. Smith, Hintonburg; N. Plaunt, Northcote; Samuel Dolson, Alloa; Hugh G. Clark, Georgetown; P. W. Boynton Dollar; Alex. Smith, Maple Lodge; Wm. Jones, Zenda; W. G. Caven, Toronto; Peter McEwen, Kertch; John Boyes, Jr., Churchill; Henry Jones, Zenda; H. J. Davis, Woodstock; J. C. Snell, London; Thos. Teasdale, Concord; Geo. Green, Fairview; Robert Vance, Ida; T. A. Cox, Brantford; Jos. Featherston, Streetsville; C. R. Decker, Chesterfield; Chas. Youngs, Brooksdale; D. DeCourcey, Bornholm; R. H. Harding, Thorndale; Jos. Barnett, Brooklin; E. E. Martin, Canning; H. B. Jeffs, Bond Head; Wm. Linton, Aurora; E. Brien, Ridgetown; G. B. Hood, Guelph; J. E. Brethour, Burford; W. A. Shields,

Milton; D. J. Gibson, Bowmanville; S. J. Lyons, Norval; A. Johnston, Greenwood; J. L. Clark, Norval; Aiken Dolson, Alloa; D. C. Flatt, Millgrove; W. H. Durham, Toronto; Frank Teasdale, Concord; Douglas Thomson, Woodstock; J. Weir, Northfield Centre; Jas. A. Russell, Precious Corners.

Judges nominated for Toronto: Samual Dolson, Alloa; Robert Vance, Ida; (Reserve) E. E. Martin, Canning.

Judges nominated for London: S. J Lyons, Norval; (Reserve) W. Boynton, Dollar.

Judges nominated for Ottawa: Douglas Thomson, Woodstock.

Judges nominated for Guelph: W. Geo. Cavan, Toronto; (Reserve) Peter McEwen, Kerth.

YORKSHIRES AND TAMWORTHS: David Barr, Jr., Renfrew; E. A. Kipp, Chilliwack, B.C.; Jas. Bray, Longburn, Man.; Lou Rogers, Weston; Geo. D. Betzner, Copetown; R. J. Kerr, Mimosa; W. R. Bowman, Mount Forest; Wm. Jones, Zenda; R. J. Garbutt, Belleville; R. H. Harding, Thorndale; N. M. Blain, St. George; J. H. Simonton, Chatham; G. North, Marden; A. Elliott, Galt; L. F. Master, Haysville; A. C. Hallman, Breslau; D. G. Hanmer, Burford; A. Laurie, Wolverton; Wm. Davies, Toronto; Richard Gibson, Delaware; Henry Dedels, Kossuth; G. B. Hood, Guelph; F. Shore, White Oak; Jos. Featherston, Streetsville; H. E. Sharp, Ida; A. F. McGill, Hillsburg; J. M. Hurley, Belleville; Geo. Gier, Grand Valley; Jas. Stephen, Trout River, Que.; Jos. Fletcher, Oxford Mills; Robert Nichol, Brussels; A. F. Foreman, Collingwood; Wm. Howe, North Bruce; Prof. G. E. Day, Guelph; H. J. Davis, Woodstock; D. C. Flatt, Millgrove; W. R. McDonald, Ridgetown; W. Elliott, Galt; R. G. Martin, Marysville; J. E. Cousins, Harriston; Geo. Green, Fairview; J. W. Callbeck, Augustine Cove, P.E.I.; J. G. Clark, Ottawa; J. C. Smith, Hintonburg; D. Drummond, Ottawa; A. Carey, Millgrove; Jas. Yule, East Selkirk; A. W. Ross, Bromley; J. J. Pearson, Cooksville; R. F. Duck, Port Credit; Duncan Anderson, Rugby; Thos. Hurley, Belleville; J. H. Grisdale, Ottawa; A. A. Colwill, Newcastle; M. Cumming, Truro, N.S.; R. O. Morrow, Hilton; Geo. Douglas, Mitchell; Jas. Douglas, Mitchell; A. P. Ketchen, Regina Sask.; W. A. Trann, Cedar Grove; P.O. Collins, Bowesville; L. Foster, Myrtle; J. G. Foster, Myrtle; J. R. Flatt, Millgrove; J. Duck, Port Credit; Ken. Featherston, Streetsville; J. W. Black, Winnipeg, Man.; Herbert German, St. George; M. Wilson, Fergus; D. Currie, Morriston; Gus A. Langelier, Quebec; Richard Birch, Anderson.

Judges nominated for Toronto: Yorkshires—Wm. Jones, Zenda; R. J. Garbutt, Belleville.

Tamworths—J. C. Nichol, Hubrey.

Bacon Hogs—Wm. Jones, Zenda; R. J. Garbutt, Belleville; J. C. Nichol, Hubrey.

Judges nominated for London: A. C. Hallman, Breslau; (Reserve) G. B. Hood, Guelph.

Judges nominated for Ottawa: J. E. Brethour, Burford.

Judges nominated for Guelph: Pure Breds—Wm. Jones, Zenda; A. C. Hallman, Breslau.

Bacon Hogs—Wm. Jones, Zenda; A. C. Hallman, Breslau; R. H. Harding, Thorndale.

POLAND CHINAS AND DUROC JERSEYS: L. R. Jarvis, Chatham; G. D. Campbell, Harwich; Mac. Campbell, Harwich; D. C. Flatt, Millgrove; D. DeCourcey, Bornholm; G. B. Hood, Guelph; Geo. Green, Fairview; Wm. Jones, Zenda; W. M. Smith, Scotland; C. A. Smith, Scotland; J. E. Brethour, Burford; R. H. Harding, Thorndale; Geo. Bennett, Charing Cross; Jos. Bennett, South Burton; Jos. Featherston, Streetsville; Prof. G. E. Day, Guelph; Jos. McGarvin, Chatham; R. Willis, Glen Meyer.

CHESTER WHITES: E. D. George, Putnam; R. E. Birdsall, Birdsall; Albert Barachy, Bloomington; Wm. Jones, Zenda; J. C. Snell, London: Geo. Green, Fairview; D. DeCourcey, Bornholm; R. H. Harding, Thorndale; G. B. Hood, Guelph; Gideon Snyder, Jarvis; Jos. Featherston, Streetsville; G. Bennett, Charing Cross; J. E. Brethour, Burford; J. C. Nichol, Hubrey; Prof. G. E. Day, Guelph; W. E. Wright, Glanworth; Robert Clark, Ottawa; D. C. Flatt, Millgrove; Geo. Douglas, Mitchell; J. C. Smith, Hintonburg; R. J. Garbutt, Belleville.

Judges nominated for London: D. C. Flatt, Millgrove; Prof. G. E. Day, Guelph.

Judges nominated for Toronto: If Chester Whites are shown by themselves, G. B. Hood, but if breeds are shown together, R. J. Garbutt, Belleville.

Judges nominated for Ottawa: Jos. Featherston, Streetsville; G. B. Hood, Guelph; J. E. Brethour, Burford.

Judges nominated for Guelph: G. B. Hood, Guelph.

ESSEX: H. G. Clark, Georgetown; G. B. Hood, Guelph; R. J. Garbutt, Belleville; R. H. Harding, Thorndale; Wm. Jones, Zenda; Jas. Main, Milton.

(A list of members of the Dominion Swine Breeders' Association is published in the appendix to this Report.)

Western Ontario Poultry Association.

ANNUAL MEETING.

The annual meeting of the Western Ontario Poultry Association was held in the City Hall, Guelph, on Thursday, December 12th, 1907, beginning at 1.30 p.m.

The President, Wm. McNeil, occupied the chair.

The President, in his opening remarks, referred to the great success of the present show, stating that it was the largest exhibition of poultry he had ever seen either in the United States or Canada. As President, he expressed gratitude to Specialty Clubs and various individuals and committees who had worked so hard to make the Show what it is. He also spoke of the good work being undertaken by the Confederation of Local Poultry Associations of Ontario.

The Secretary read the minutes of the last annual meeting, and also the minutes of the Directors' meeting, both of which were accepted.

The financial statement for the year ending October 31st, 1907, was read and accepted.

The President made a report of the negotiations carried on with the Secretary of the Canadian National Exhibition with the view of getting a second representative.

Moved by Mr. Donovan, seconded by G. A. Robertson, "That this Association apply to the Canadian National Exhibition for the admission of two delegates as formerly; and suggests also that each local Poultry Association and the Confederation of Local Poultry Associations be given representation on the Poultry Committee." Carried.

Moved by Mr. Tyson, seconded by G. A. Robertson, "That in the opinion of this assembly the future success of the Poultry Department of the Canadian National Exhibition depends on the action taken by that Exhibition in the erection of a new building for Poultry and the restoration of the prize list to its old form." Carried.

Moved by Mr. Hearn, seconded by Mr. Mick, "That the Provincial Winter Fair Board be requested to make an arrangement by which local Poultry Associations may be given admission to the Winter Fair along somewhat similar lines as the Farmers' Institutes." Carried.

It was suggested that exhibitors, beyond a certain distance from Guelph, should be allowed until Tuesday morning to get their birds into the Show building. This matter was referred to the new Board of Directors for consideration.

Moved by Geo. Robertson, seconded by Mr. Hellyer, "That this Association send a deputation to Ottawa to interview the Minister of Agriculture and ask that special arrangements be made so that birds going to exhibitions may be shipped on Sunday." Motion Lost.

Mr. Woodward wished that something more might be done for the Pigeon Department, in classification and prizes.

OFFICERS FOR 1908

Hon. Presidents ..... Hon. Nelson Monteith, Toronto.
Dr. A. W. Bell, Winnipeg, Man.
President ..... Wm. McNeil, London, Ont.
1st. Vice-President ..... Allan Bogue, Woodbank.
2nd. Vice-President ..... W. J. Bell, Angus.

Directors.

L. H. Baldwin, Deer Park.
A. W. Tyson, Guelph.
G. G. Henderson, Hamilton.
T. H. Scott, St. Thomas.
J. R. Laidlaw, Paisley.
R. Oke, London.
N. K. Cornwall, Thamesville.
C. H. Wilson, Hawkstone.

Representatives to Fair Boards.

Canadian National ..... Wm. McNeil, London.
Wm. Barber, Toronto, (second representative, if two can be secured).
Western Fair, London ..... J. H. Saunders, London.
R. McCurdy, London.
Provincial Winter Fair ..... Wm McNeil, London.
A. W. Tyson, Guelph.
L. H. Baldwin, Deer Park.
F. A. Woodward, Toronto

FINANCIAL STATEMENT.

For Year Ending October 31st, 1907.

Receipts.

Members' fees	$327 00

Expenditures.

Balance due Treasurer, as per last Report	$ 27 50
Directors' fees and expenses	16 35
Balance of memberships transferred to Winter Fair	295 85
	$339 70
Balance due Treasurer	$12 70

Examined and found correct, this 12th day of December, 1907.

(Signed) J. M. Duff, *Auditor.*

(Signed) Wm. McNeil, *President.*

(Signed) A P. Westervelt, *Treasurer.*

DIRECTORS' MEETING.

At the close of the annual meeting, the newly elected Directors met in the City Hall.

There were present: Wm. McNiel, W. J. Bell, A. W. Tyson, G. G. Henderson, C. H. Wilson, T. H. Scott, R. Oke, L. H. Baldwin.

The President occupied the chair.

The following recommendations were made to the Winter Fair Board regarding changes in the classification of the prize list:

1. That Chinese Geese have two classes, one for White Chinese Geese and one for Brown Chinese Geese.

2. That a class be added for Pit Games.

3. That the Buff Leghorns Class read "S. C. Buff Leghorn;" the R. C. Buff Leghorns to show in the A. O. V. Fowl Class.

4. That a class be added for Indian Game Bantams.

5. That a class be added for Japanese Bantams, A.O.V.

6. That Rhode Island Reds be added to the Sale Class.

7. That a section for Asiatics be added to the Sale Class.

On motion it was resolved that an additional $100 be asked for the Pigeon Department and that the distribution of this amount be left to the Canadian Pigeon Fanciers' Association.

It was decided to ask that the prizes for Cavies and Rabbits be increased to $1.50 for 1st, and $1.00 for 2nd prize.

APPOINTMENT OF JUDGES.

All Plymouth Rocks: P. Schwab, Irondequoit, N. Y.
Buff Orpingtons and all Leghorns, except R. C. White: R. Oke, London.
Minorcas, Spanish, Black and White Orpingtons, Andalusians, Dominiques, Javas, LaFleche and Creve Coeurs: N. Cosh, Auburn, N.Y.
Games, Game Bantams, and all Asiatics: S. Butterfield, Windsor.
Ornamental Bantams, Silkies, Sultans and Hamburgs: Wm. McNeil, London.
Rhode Island Reds, and all Wyandottes except Partridge: James Tucker, Concord, Mich.
Partridge Wyandottes, Polands, Dorkings, Red Caps, Houdans and Water Fowl: L. G. Jarvis, Grimsby.
Turkeys: James Anderson, Guelph.
Pigeons: C. F. Wagner, Toronto.
Ornamentals: Wm. Barber, Toronto.
Utility Pen and Dressed Poultry: Wm. Barber, Toronto; and W. R. Graham, Guelph.

It was decided to ask that a wire walking coop with canvas top be supplied each judge.

(A list of the members of the Western Ontario Poultry Association is published in the appendix to this Report).

Eastern Ontario Poultry Association.

ANNUAL MEETING.

The annual meeting of the Eastern Ontario Poultry Association was held in the Howick Pavilion, Ottawa, January the 23rd, 1908, at 7 p.m. The President, John A. Belford, occupied the Chair.

The CHAIRMAN expressed his pleasure in seeing such a large attendance of poultry fanciers, and gave a brief review of the work carried on during the past year which has led up to the very successful exhibition.

Moved by WM. MCNEIL, seconded by W. H. CARLETON, "That the minutes of the last meeting be taken as read and accepted." Carried.

Moved by WM. BARBER, seconded by JOHN A. BELFORD, "That this Association request that purchasers of birds in the sale class be allowed to take their birds with them upon the completion of the sale providing that the judging has been completed." Carried.

Moved by W. H. CARLETON, seconded by JAMES MILLS, "That four judges place the awards on poultry at the next show in addition to the pigeon judge." Carried.

Moved by W. J. ANNAND, seconded by JOHN BOGUE, "That the following be judges at the next show: Wm. McNeil, London; Sharpe Butterfield, Windsor; L. G. Jarvis, Montreal." Carried.

Moved by GEO. HIGMAN, seconded by F. A. JAMES, "That Richard Oke, London, be the fourth judge for poultry." Carried.

Moved by W. H. CARLETON, and seconded, "That C. F. Wagner, Toronto, be the judge for pigeons." Carried.

Moved by F. A. JAMES, and seconded, "That A. G. Gilbert, Ottawa, and J. C. Stuart, Ottawa, be judges for dressed poultry." Carried.

Moved by GEO. HIGMAN, seconded by W. H. CARLETON, "That all male birds be cooped singly and that this Association apply to the Ontario Government for 500 more coops." Carried.

Considerable discussion took place regarding the time at which all birds should be in the building and cooped; It was finally moved by JOHN BOGUE, seconded by J. H. MAGILL, "That all poultry exhibits must be in the building by 10 p.m. Monday, except those shipped from a station 100 miles or more from Ottawa. Such exhibits must be placed by 10 a.m. Tuesday. All birds not in the building by 10 a.m., Tuesday, to be debarred from competition." Carried.

It was decided that the judging of the dressed Poultry should take place on Tuesday.

Moved by F. A. JAMES, seconded by JAMES MILLS, "That the class for Rhode Island Reds be divided, making separate classes for S. C. and R. C. Rhode Island Reds, and that a section for Rhode Island Reds be added to the sale class." Carried.

Moved by JOHN BOGUE, seconded by W. F. GARLAND, "That the class for Japanese Bantams be divided into classes for White Japanese Bantams and Japanese Bantams A. O. C." Carried.

Moved by JOHN BOGUE, seconded by A. W. E. HELLYER, "That a class be added for White Rose-Comb Bantams." Carried.

Moved by Wm. McNeil, seconded by John Bogue, "That a class be added for Buff Laced Polands and that both Golden and Silver Unbearded Polands show in the A. O. S. V. Poland class." Carried.

Moved by Geo. Higman, seconded by W. F. Garland, "That classes be added for Columbian Wyandottes and Black Wyandottes." Carried.

Moved by R. E. McKinstrey, seconded by John A. Belford, "That the prizes for pigeons be the same as the prizes for pigeons at the Provincial Winter Fair." Carried.

Moved by C. C. Cornish, seconded by R. E. Blakely, "That Ice pigeons be struck off the list and Blue Chequered Homers be added." Carried.

OFFICERS FOR 1908.

Hon. Presidents	Lord Aylmer, Ottawa.
	Hon. Sydney Fisher, Ottawa.
	Hon. Nelson Monteith, Toronto
President	Geo. Robertson, Ottawa.
1st Vice President	Geo. Higman, Ottawa.
2nd Vice-President	W. H. Reid, Kingston.
Secretary-Treasurer	A. P. Westervelt, Toronto.

Directors.

J. H. Warrington, Cornwall.	F. A. James, Ottawa.
F. J. Blake, Almonte.	W. F. Garland, Hintonburg.
W. M. Osborne, Brockville.	C. J. Daniels, Toronto.

Representatives to Fair Boards.

Canadian National	Geo. Robertson, Ottawa.
Central Canada	John A. Belford, Ottawa.
Eastern Ontario Live Stock and Poultry Show	Geo. Robertson, Ottawa.
	John A. Belford, Ottawa.
	Geo. Higman, Ottawa.
Auditor	J. M. Duff, Guelph.
Superintendent	R. E. McKinstrey, Ottawa.

(A list of members of the Eastern Ontario Poultry Association is published in the appendix to this Report.)

The Provincial Winter Fair.

PUBLIC MEETING.

The Public Meeting, held in connection with the Winter Fair, was held in the City Hall, Guelph, on Wednesday, December 11th, 1907, at 7.30 p.m.

The chair was occupied by Hon. NELSON MONTEITH, Minister of Agriculture for the Province of Ontario, and an excellent musical programme was arranged for and rendered under the direction of Capt. T. E. Robson, of London.

The CHAIRMAN, in calling the meeting to order, said: "We are delighted to see so many present to enjoy what I hope will be not only for their edification, but also for their profit. We have gathered in the Royal City once again to attend our annual Winter Fair, or what we are now pleased to term, "The Premier Exhibition." In an adjoining building there is gathered a larger exhibit of poultry than has probably ever been brought together in this country. We have also gathered there from all parts of this Province, animals surpassing in quality those exhibited at any preceding show. These are things that we are proud of as agriculturists, because they have to do with the advancement of agriculture in this great Province of Ontario. We have here to-night a splendid representation of the agriculturists of the Province, and of the Women's Institute Convention, which has held sessions during the day,—women of the farm homes who so largely guide the destiny of this Province of Ontario. We are glad to see such a large number of them with us to-night to grace our proceedings. We are glad to note, year after year, the increasing number of the fair sex who pay tribute to the great calling of agriculture by visiting, in increasing numbers, this exhibition. The stock interests of Ontario are very large, and from them spring other interests that mean much to the Province. Take for example the dairying interest; the last complete figures we have of the dairy product show that it exceeded in value the sum of $38,000,000—a very vast sum indeed to add to the wealth of this Province. It is needless for me to dwell upon figures to-night; suffice it to say that we feel that for the convenience of visitors and exhibitors at this show, it is our duty to go forward and increase the capacity of your Fair building at Guelph. I was very much struck this afternoon with how inadequately we meet the demands of the people gathered at this exhibition. We were trying this afternoon, in consequence, to disprove the old axiom that no two bodies can occupy the same space: we were trying to put two bodies in one space in our lecture room. We had seating capacity for some three or four hundred people, and we were trying to accommodate from five to seven hundred. Many were turned away who were unable to gain admittance, and we believe when we meet with such a desire for information as was seen manifested by the crowd who visited the exhibition, that it is our duty as servants of the people to see to it that proper and adequate accommodation is provided. I believe there is no better expenditure, from an educational standpoint, than increasing, as the need of the situation demands, the capacity of this great educational feature

in our national life. I trust that as the years go on, these Shows will become a greater and greater motive power in this Province. When we find the stock-breeders of this Province going over to the neighboring Republic, and so emphatically proving their superiority as they did at the recent exhibition at Chicago, we feel pride in their success and prowess as breeders and judges of live stock; and we feel satisfied that if they have the necessary opportunity, they will do even better at home. We hope to bring out a larger and larger number of those who are in the beginners' class. I believe the time has now come—with all honor to veterans who have blazed the way—when those who are new in the business should get a wider opportunity than they now have.

I have now much pleasure in calling upon His Worship, the Mayor, to address you.

Addresses of Welcome.

Mayor Newstead.—I am pleased to note that my part at this meeting is a very brief one. It is indeed a great pleasure for me to welcome you, one and all, to the Royal City of Guelph. We extend to you a most hearty welcome, and I trust that every one of you may feel as comfortable here in this city as you would in your own homes. We want those of you who have come to visit us for the first time to realize in themselves a desire to come back again. A large number of you have been present with us many times, and you give evidence of the good enjoyment you have had in visiting the Fat Stock Show.

I am pleased to address you as farmers. I had the pleasure yesterday of listening to the address of Prof. Dean, of the College, who referred to the time when I was looked upon as a hayseed upon the farm at Waterloo. I thought the time would come when we farmers would occupy an entirely different position. I am the first farmer who has been elected Mayor of the City of Guelph.

I am glad to see that each succeeding year brings a greater attendance to our Winter Fair. We feel that every succeeding year is a record breaker, and I am pleased to see that this year is no exception, and, as the Hon. Mr. Monteith has said, there is not enough room for stock or people. And isn't that good evidence of the wonderful interest we farmers are now taking in this grand Winter Fair?

Speaking on behalf of the citizens of Guelph, I may say we take great pride in its success, and we are asking the whole Province of Ontario to rejoice with us. We shall always be proud of it. If it is my good fortune to be Mayor next year, I trust I shall be able to show you a building twice the size of the present one, and we shall have a Winter Fair not surpassed in this Dominion.

J. P. Downey, M.P.P.: I shall not occupy much of your time. I want to put myself at issue with His Worship, the Mayor. He has told you that he is the first farmer that has ever occupied the poition of Mayor of this Royal City of Guelph. Why, Mr. Chairman, ladies and gentlemen, it was not as a farmer he sought that position at all; it was as an agriculturist. And when he was asked: "What is the difference between a farmer and an agriculturist?" this was his reply: "The difference is that a farmer works the farm, and an agriculturist works the farmer." You are all heartily welcome to Guelph. We want you to make every hour and every minute of your stay in this city pleasing and profitable. If you have any grievances let us know about them. Do not lock them up in your bosom and carry them away, and complain when you go home that the people of Guelph did not use you well.

We want to make every man, woman, and child at this great Agricultural Congress comfortable and happy. We extend a hearty welcome to the distinguished gentlemen whose names are on the programme to-night. We have with us for the first time during our Winter Fair, a gentleman whose acceptance of the highest position, educationally, in this Province, or in this Dominion, was hailed with satisfaction throughout Ontario. We welcome Dr. Falconer, because we live under the shadow of an Institution that is proud to number itself in that great sisterhood of which the Toronto University is the acknowledged head, the Ontario Agricultural College. We welcome him, because, as he eloquently put it to-day, the enduring success of Toronto University, which we believe entered upon a new epoch when he was called to it, depends upon the strength and vitality which it may draw from the section of Ontario largely represented in this audience to-night. We also welcome the Provincial Treasurer, Hon. A. J. Matheson. One of the problems that comes before us is, How can we aid one another? What researches can we make for the benefit of ourselves and our brothers? and therefore, we welcome the gentleman from Missouri, Mr. King. The Hon. Mr. Monteith, in his address to-day, made reference to the necessity of encouraging amateurs, sons of farmers who have not yet identified themselves with this Winter Fair. The boy on the farm is apt to say, "What is the use of my going up against the old professional feeder." I think the time has come when we should say to him, "If you young fellows have the ambition, the taste, and the capacity to breed, feed and finish a good beef animal, we are going to give you encouragement and put you in a class by yourselves. I desire to say that next year there will be five prizes offered for the best animal under three years of age, of any breed, exhibited at the Winter Fair by an exhibitor who has never bred or fed an animal that won a prize. The first prize will be $50; the second, $40; the third, $30; the fourth, $20; the fifth $10; and it will be open to the Province of Ontario. In addition to that, we will commence with the County of Wellington, and give prizes to exhibitors within the County of Wellington alone.

As citizens of Guelph, I again extend to you a most hearty welcome, and congratulate you on the increasing success of this great Winter Fair.

Replies to Addresses of Welcome.

Mr. Arthur Johnston, President Provincial Winter Fair: I am sure it would be improper on my part to address you at any considerable length of time, with the talent you have before you to-night. I have been identified with this Winter Fair ever since it has come to Guelph; and many years before it was your Winter Fair I was in attendance at your Fat Stock Shows. I shall content myself with thanking the Mayor and Mr. Downey, not only for their kindness on this occasion, but for their continued desire to make every man who has come to the Fair as comfortable as he can possibly be. I quite agree that the accommodation for both man and beast is entirely inadequate. I am very certain, however, that the accommodation for the beasts will be improved, and that the officials of Guelph can be depended upon to rise to any situation. Some say if it were in Toronto there would be so many advantages. Yes, quite so; part of us would go to the theatre, and some to places no better. The farmers will not come to these educational meeting unless they are properly accommodated. One farmer said to me: "You have no right to bring us here when we cannot see or hear one word. Mr. Miller spoke very loudly this afternoon, yet many could not hear him." I will call upon the Minister of Agriculture to rise to the situation, and do

not make any half work of it. I can assure the people of Guelph that by their efforts to accommodate the people who came here they have made many lasting friends.

Prof. G. E. Day, Guelph: One of the things I have been reflecting upon during the last few days, is that old problem of why in that little island of Great Britain, they can lead the world in the production of high class stock, I presume many of you have puzzled over that problem, and wondered why it is that in the Province of Ontario and in the United States, they cannot apparently, come up to that little bit of land, isolated as it is from the great continents of the world, in the production of high class live stock. Now, no doubt, there are a great many reasons, but it seems to me there is one reason that is very apparent, and that is, the intense interest which is taken in live stock by all classes of people in Great Britain. In this country, and I am sorry to say in the United States as well, there is a tendency on the part of a great many people to look upon the breeding of live stock as just a little beneath the dignity of a person having very nice tastes. It is probably owing to this fact that the ladies—that is, a great many of them—think it is just a little beneath them to take an active interest in live stock. I am glad to see a large attendance of ladies here; and, no doubt, false ideas regarding live stock are dying out in this country; and I trust they will be dead entirely in the course of a few more years. When you go to Great Britain you find very different ideas from what prevail here. If you look at the life of the great Queen Victoria, you will find that she took the most active and intelligent interest in the breeding and improvement of live stock. It was no mere perfunctory interest; it was an active interest. The present king of Great Britain is a stock-man, and though he is the leading diplomatist, he is also one of the leading stock-men of Great Britain, and a man who takes an active interest in agriculture generally. Take an intensely loyal people such as we have in Great Britain, and when their Sovereign takes an active interest in an industry, they necessarily look upon it as the greatest of all callings. And while certain callings may be just a little questionable for any of the nobility to engage in, there is no question about live stock. Lands and live stock always add to the social status of their possessor in Great Britain. We want a little more enthusiasm along live stock lines in this Province. It is a royal calling, and it is meet that it should receive a royal welcome in this Royal City of Guelph. I think it is very appropriate that the gentleman who graces the Mayor's chair, and he who presides at this meeting, should be farmers. I think it is the most happy combination of circumstances that we could possibly have, and a circumstance which points to great success for this Winter Fair. As a member of the Winter Fair Board, I beg to join our President in thanking the citizens of Guelph, represented by our worthy Mayor, for the very kind and hearty welcome they have given us as a Fair Board and as visitors to this great Fair, and I am sure we all appreciate very highly the efforts they have put forth to make us feel entirely at home.

ADDRESS.

By President Falconer, University of Toronto.

Along with Col. Matheson, whose admirable speech will bear fruit, I have been very much struck by what I have seen this afternoon, and since coming last evening to Guelph, in the way of the agricultural resources of the Province, and especially of this part of it. It was quite a revelation for

me this afternoon, to see the various parts of the Show, to see the great assemblage in the Poultry Department, so varied and so rich, and exhibiting such intelligent industry in its production, also in the live stock, and in being privileged to stand by the judges and watch them make some of their awards. One cannot help but feel that in this manifestation of the agricultural work of the farmers of this Province, there is a great deal which may well cause the Province to regard itself with pride in this respect. There are great evidences of industry, and, as I am told, and as I am sure is correct, evidences of progressive industry, and of constantly developing power. This is unquestionably a great educational factor in the life of what is probably the largest single and most national department of the life of the Province, for, if I am not altogether misinformed, the agricultural factor of the Province is really its most important production. And one must certainly view, with a great deal of satisfaction, the intelligent interest that was taken by those who came near enough to see and watch carefully the various movements of the judges and of those interested in the Show this afternoon.

In driving through the Province, especially the Western part of it, and in going through it on the train in such directions as I have, not only since coming this time, but several times before, one cannot but be impressed, as Col. Matheson has already said, by the magnificent physical basis that there is in this Province, for fine agricultural development, and wholesome, steady production, that brings comfort and wealth to those who are engaged in it. I think, of necessity, we must say that there are very few places, if any, where the agricultural prospects are brighter than they are in Ontario. And that, I believe, is no mere platitude, and on my part, arises from no desire to say what is pleasant. I believe that in the Dominion as a whole, we have a magnificent physical basis for a splendid national life, a vast variety of resources, and a people intelligent and capable of rising to their opportunities. Unquestionably, we have an opportunity for developing agriculture to a very high degree; and such a Show as we have seen this afternoon gives evidence of industry. I hope that what Col. Matheson has said may come true.

I wish this evening not to dwell so much up n this, as it has already been referred to several times by previous speakers. I wish to ask you, as a body of men engaged on the land, that you with your industry, should get more and more comfort by giving heed to the scientific treatment of the soil, a result which will come through the exercise of a higher degree of intelligence. This means the improvement of the home and a greater degree of refinement. You have duties to yourselves in this regard. You have duties to us. You must exercise intelligence in the use of what you get. Do not imagine that when I say refinement must come into your homes to a greater degree, that I think this will involve lavish expenditure. That is a very vulgar sentiment. It is simply from want of intelligence that there is often such a display in the home as brings neither comfort nor refinement. Refinement depends upon the person and upon the exercise of the intelligence, and if you know the way you can, by the use of a very moderate amount of money, attain to a real degree of comfort and refinement and intelligence in the home. Do not imagine for a moment, that the noblest and purest and best things in life are those that cost most. They are not. The most beautiful curves in geometry are the simplest curves. The most beauiful statuary in existence is, to the outward appearance, the simplest. And the most beautiful pictures are not always the most elaborate. It is simplicity of the mind that brings beauty. So, I should bid you exercise more and more personal intelligence, in order to use your money in the best way. To-day, I was very glad

to know, from Prof. Harcourt, that the foods that are the simplest are the best. And those of us, who from childhood, have eaten our oatmeal porridge, or as the Americans call it, "oat-meal," and our plain wheat bread, have been getting the very best we can in the way of food. And that goes all through life. Pure air, common to everyone; pure water, common to everyone; God's blue sky, with the clouds floating in it by day, and the stars by night, common to everyone—these are great blessings for you and me, and it is only by the use of intelligence that we know how to use them, and how to get the best from them. And I now go on further to say that, while by your industry you can get comfort through greater mastery of the soil, you have duties also in the way of obtaining a higher degree of intelligence, not only for yourselves, but for your children. I was very glad to hear Col. Matheson say, with such emphasis, that your children are more to you than your live stock, great as live stock is. Prof. Day is probably right in saying that you should put more work on your live stock. But what greater gift has this country than its children, what greater blessing has any man or woman than their sons and daughters? It cannot be that there are men in this intelligent Province, who think that it means little to them, to whom they may intrust the welfare and the upbringing of their children outside of the home, the school master or school mistress who model their character.

Can it be that you take so little interest in it that you will put the care of these children in the hands of the cheapest person whom you can hire to do your work? This is not the spirit for an intelligent people such as this Province has; and if such a spirit exists, until that spirit is removed, the Province can never certainly make the advance that its most intelligent portion hope it will make. You must be willing to spend on the school, and to do it in no niggardly style. Let not the man who says he has no children, and that he can live by himself, imagine that he can escape his duties. In a democracy, no man liveth to himself, or dieth to himself, and whether you think it or not, you will suffer, if you are unwilling to take a share with your neighbors and help them in the building up of the country as a whole.

In speaking to the farmers, let me urge that you should take even more interest than you do in the College that has been provided for the education of those on the farm. It has been a special pleasure for me to be at the College since last night. I have been struck, not only with the College, and the students, and the teachers, but with the scope of what is given there. In its adapatability, in its results, it is unquestionably a College of which this Province may be proud, and those who go forth in increasing numbers, we hope will carry with them that scientific spirit, which they have imbibed in this College, so that the results before very long, will be manifest through the length and breadth of the Dominion. The MacDonald Institute will also be able, in time, to send out women who will bring refinement and solid common sense, and the ability to use their intelligence and their culture in the homes of our people, sweetening their lives and rendering them happier, and spreading the joy of a larger outlook than, perhaps, has been in many already, and preparing for a future, such as we little think of.

And then, as representing the University of Toronto, I want to say, that you, as a farm population, have a large interest and share in our institution. Perhaps there are few Universities so representative of the people as is the University of Toronto. I am not quite able to give you the exact proportions to-night, but there must be fully two-thirds, or more than two-thirds of the students of the University, who come from Ontario, outside the city of Toronto. I think I am safe in saying, as I have already said to-day in another place, that it is the intelligent agricultural population of the country

who provide our students in a large measure—students on whom we can rely because of their character, because of their intelligence. Often, this may be due to the fact that they have been living a life undisturbed by other things, a life in which they have had to exercise their toil, a life in which they have had to deny themselves, a life in which they have had to work for what they have got. Such a life as produces moral ability. Many of your sons and daughters are going through the faculties of the University preparing for various professions, and we must keep these faculties up to a high standard, because we require for our people the very best quality of intelligence. We cannot afford to allow men of low calibre to get into the professions. If the ministers who occupy your pulpits are not well trained they will lead you into all kinds of fanaticisms. If the doctors are not well trained, you will be led away by their nostrums. If the lawyers are not well trained, what sort of legislation are we to have? The medical men should be men whom you can trust, men who have been trained in the most recent methods of research, men who are so educated that they can grow with age, and will not become old in spirit. That is one of the greatest dangers of all the professions. A man becomes slack, because he has not been so trained that he can develop and meet new situations as they arise. In the Faculty of Applied Science we must send men out whom we can trust. Every time you travel on a railroad, you are at the mercy of the engineers who built the line. Every time you cross a bridge, and every time you enter one of those large buildings in the city, you rely on the work of engineers. How can you escape the engineer and the various applications of science? You may think that the quality of training in the professions does not concern you, but it does concern you, and you want in the professions men who have been trained to the highest possible standard. In this country of ours we should have men who can add to the knowledge of their profession, as new conditions arise, that they may be able to meet these conditions and say the rule applies here thus and thus. We want men who can face new facts and give us the right solution, and remember these things cost money. You may be astonished at the expense of the University, but it must cost and will cost, if the crying needs of the Province are to be met.

Then there is the new Department of Forestry. We know that in the United States, they are lamenting over the ruthlessness with which their forests have been destroyed. In Canada, our forests are not yet in that position. We hope we can preserve a great deal of our wealth, and that the farms may be more and more reforested, and the resources of this kind husbanded. There are other Faculties, on which I need not linger to-night. My object has been, to bring before you the fact that you must be interested in all these departments of our national life, which tend to develop the intellect of our people. There is not a particle of doubt about it, that our people have the mental quality, if they only get the training, and we have the physical possibilities upon which we can advance more and more.

Further, as intelligent men and women, you ought to have large interest in others outside of the family. No man should sit by himself, in his own little home, without some regard for others around him. I do not stop even here. We have an enormous heritage in the Dominion, and we have a vast future before us, if only we use it right. Send your intelligence out, get knowledge in from every quarter, and live as citizens of a large country, and a country that has cosmopolitan interests, and by so doing, you will be more qualified to do your work, more qualified to judge intelligently, the questions that lie before you. If a man knows large things, he knows how to do things that are near. By his breadth of view, by studying the questions

of our country as a whole, by interest in the larger life of the whole people, we shall, in our own affairs, develop a great resourcefulness, and I believe, a much higher degree of comfort and pleasure.

A country cannot be great unless it is inspired by a high degree of integrity, uprightness, honesty and honor. We shall be a people upon whose word the world can rely. When we say a thing we mean it, and let us not say it too soon. Let us think before we say, and when we do say, let us perform. In our dealings with others, let us be true, and remember that it is folly to think we can escape from the sweep of the moral law. It is relentless, history has told us. Any people that delude themselves into thinking they can trifle with things that have been established before the times when the hills were laid, are certainly giving evidence of their utter folly. Yes, integrity, uprightness and honor are of the very essence of the life of our nation. Along with this comes the necessity of sympathy, the necessity of understanding others. Multitudes are coming into this land to-day bringing problems to us that perhaps we know nothing of, but which some day we shall have to face. The old world is sending myriads who are restive under wrongs and they ask us, at once, what we have to do for them. We may not have the solution for their wrongs, but at least, we can meet them in the spirit of intelligence, integrity, and sympathy. We can seek to remove the possibility of the repetition of the past, in this new land, and our surest way to that end is by remembering that the "Primal duties shine aloft like stars," but "the charities that soothe and bless, and heal, lie scattered at our feet like flowers."

Lectures on Practical Subjects, Delivered in the Lecture Room in the Winter Fair Building, Guelph.

THE PRINCIPLES OF INCUBATION AND THEIR APPLICATION TO SUCCESSFUL POULTRY RAISING.

By W. H. Day, Lecturer in Physics, O.A.C., Guelph.

Cream separators are common all over the land, while ten years ago they were scarce. They stood the test of practise, and have been adopted. Incubators are on trial to-day and if they justify themselves they too will have their day. Dozens of incubators are being put to practical test throughout the Province; some of them are successful and others are not. If the prinples of incubation were more generally understood, more incubators would be successful. At the O.A.C., we have been investigating some of the principles that lie at the basis of incubation, and I want to show you a few of the results we have obtained.

For a long time it was believed that there was only one principle in incubation, and that was to keep the temperature right, and the hatch would come, and produce good strong healthy chicks; but we are in a position to show you to-day that is not the case—that there are other principles. Whether moisture was essential to successful hatching was a problem that had often presented itself. In undertaking to investigate the problem of moisture, we said the hen is the natural incubator, we must study her, and find out the conditions of moisture that exist in the hen's nest, and apply these conditions to the incubator.

Prof. Dryden, of the Utah Station, had already called attention to the fact that there is a great deal of carbon dioxide in the hen's nest. If all the openings in this building were closed up, the air would soon become impure, by the gases exhaled as we breathe. The chief of these is carbon dioxide. It is a chemical compound composed of one atom of carbon to two atoms of oxygen. It is not a poison, but when it is present in large quantities, it displaces free oxygen and the lack of oxygen causes a feeling of suffocation. The atmosphere contains about three parts by volume of carbon dioxide in 10,000 parts of air, but Mr. Dryden found many times as much under setting hens. We said we would verify Mr. Dryden's work, and also see whether carbon dioxide was beneficial in the hatching of eggs. We also said we would find out whether there was much moisture in the nest, or little, and whether that moisture played any part in the incubation of eggs. Then we said, what about the change of air or ventilation? Is there much or little ventilation in the hen's nest?

To determine the moisture in the nest we put two thermometers under the hen, one called a wet bulb because its bulb is kept wet by a close fitting wet linen sack, and by the difference in the readings of these two thermometers, we could tell how much moisture there was in the hen's nest. The same method was used to determine the amount of moisture in the incubator air. We have found out as a matter of measurement that there is 50 per cent.

more moisture in the hen's nest than in the incubator run with water in the bottom, and that there are three or four times as much moisture in the nest as in an incubator run dry, and we said if moisture is a vital principle in incubation, we must have moisture, and then we will improve the hatch.

COMPARISON OF METHODS OF HATCHING.

Method	No. of eggs set	% infertile	% fully formed dead in shell	% hatched of total eggs set	% hatched of fertile eggs	C O2 in 10,000 parts	% evaporation	% of chicks dead in 4 weeks	% of live chicks at 4 weeks from eggs set	No. of hatches
Hens.										
Earth Nest	23	13.1	4.3	60.9	70.0	35.6	9 8	14.3	52.2	2
Straw Nest	23	8.7	8.7	52.2	58.1	37.14	10.9	16.6	43 5	2
Ventilated Nests	23	13.1	13.1	60.8	70.0	24.08	14.6	35.7	39.1	2
Roomy Nests	123	10.6	7.3	66.6	74.3		12.2	20.7	52.8	11
Crowded Nests	176	15.9	4.0	50.0	56.8		11.8	12.5	43.7	16
All Hens	299	13.7	5.4	56.9	71.6	31.93	12.1	16.5	47.5	27
Incubators.										
Buttermilk & Zenoleum	61	8.2	19.7	49.1	53.5		12.2	8.0	45.9	1
Whole Milk & Zenoleum	110	17.3	10.0	58.2	70.1	11.11	9.0	21.8	45.5	2
Moisture (H_2O) CO_2 & Zenoleum	44	13 6	11.3	52.2	65.0	55.16	8.3	13.0	45.4	1
Moisture H_2O & Zenoleum	464	16.2	11.4	52.8	63.6	8.29	10.2	16.7	44.0	6
Buttermilk	583	18.3	10.0	52.0	63.9	12.03	10.0	28.0	37.4	8
Moisture (H_2O) and CO_2	129	20.1	7.8	48.1	59.9	55.0	9.8	22.5	37.2	2
Moisture (H_2O only)	1221	13.9	11.3	51.9	62.7	10.46	12.1	37.0	32.7	13
Fumes, Dry	112	24.1	14.3	38.4	52.5	58.21	13.3	16.3	32.1	2
Zenoleum, Dry	327	13.1	13.7	47.4	59.0	5.86	15.2	32.2	32.1	3
Skim Milk	330	13.6	13.0	40.6	49.6		11.9	26.1	30.0	3
Water, Milk & Zenoleum	83	12.0	14.5	32.5	37.0	7.78	12.6	15.3	27.5	1
Fumes, Moisture & Zenoleum	61	21.3	14.7	34.4	43.7		9.4	23.5	26.2	1
Whole Milk	353	15.3	12.2	48.7	56.9	12.12	10.8	52.3	23.2	4
Dry, (no treatment)	1406	16.3	12.6	40.7	52.1	9.15	15.1	60.5	16.1	12

You will observe that this chart gives a comparison of various methods of hatching. The first column gives the number of eggs set; the second column gives the per cent. of infertile eggs; the third column, the per cent. of fully formed dead in the shell; the fourth column, the per cent. hatched of total eggs set; fifth column, per cent. hatched of fertile eggs; sixth column, the number of parts by volume of carbon dioxide in 10,000 parts of air; seventh column, the per cent. of evaporation from the eggs; the eighth column, the per cent. of chicks dead in four weeks; the ninth column, the number of live chicks four weeks of age for every 100 eggs set; and the last column the number of hatches.

Beginning at the very bottom we find the dry incubator,—that is the incubator into which no moisture was introduced, with the poorest results of all, only 16 chickens out of every 100 eggs set; over 1,400 eggs being hatched in these dry machines. To observe the effect of moisture, note the eighth line from the bottom where moisture was provided by water only. Over 1,200 eggs were hatched by this method, and they gave us 33 chickens for every 100 eggs set. Comparing the results in each column, you will find these moist machines ahead of the dry ones in every particular; that is, there were less infertile eggs, less fully formed dead in the shell, greater per cent. hatched of the total eggs set and also of the fertile eggs, more carbon dioxide in the machine, less evaporation and a much less death rate. These great differences in result

between these two methods of hatching cannot be due to difference in the eggs set, because in each test the eggs in the moist machines were from the same hens as those in the dry machines. Every hen was trap-nested, and from each one to-day's egg would be put in a dry machine, to-morrow's in a moist machine, the next day's in a dry machine, the following day's in a moist machine, and so on with all the eggs laid by each hen. Hence there could be no radical difference between the eggs hatched by the two methods; hence we attribute the improvement in results to the moisture alone: that is by simply making the air in an incubator very damp we are able to get more than twice as many chickens four weeks old out of 100 eggs set as in the dry machines; therefore, we say that another principle of incubation is that there must be plenty of moisture present.

To ascertain if carbon dioxide (CO_2) was beneficial some of the gas was introduced into the egg chamber of one of the machines, enough to raise the carbon dioxide content in the incubator to about twice the amount under the hen. This treatment gave us 37 chickens for every 100 eggs set. It will be observed this method gave more infertile eggs and a smaller hatch than where moisture only was used, but to counterbalance these losses there were fewer dead in the shell, and the death rate was very much lower, giving a net result of four chickens more per 100 eggs set than moisture only, so that carbon dioxide appears to be beneficial to incubation. Now it is known that certain bacteria give off carbon dioxide in their life process, hence the idea was suggested to inoculate buttermilk with some of these bacteria and put the milk in the trays of some of the machines. The net result of these machines was 37 chickens for every 100 eggs, just about the same as when pure carbon dioxide was introduced into moist machines. Buttermilk alone, without inoculation, was also tried, and it gave the same result, 37 chickens out of every 100 eggs set, showing that something else may be as beneficial as carbon dioxide

At this stage of the work Prof. Graham happened to disinfect some of the machines with zenoleum, and it was observed that the results were greatly improved. From that point on, disinfection by zenoleum was systematically tested, and it was found that almost invariably the zenoleum had the effect of increasing the results very much. By its use in conjunction with moisture by one method or another, we were able to get from 44 to 46 livable chickens for every 100 eggs set. This was a long step in advance. The mere use of this disinfectant increased our results by 7 to 9 chicks on every 100 eggs set. Therefore we say there is another principle: the incubator must be thoroughly disinfected. We do not yet know why this is necessary.

66⅔ per cent. of the chickens that we hatched in the dry machines died, and they nearly all died with white diarrhœa; with the moisture 37 per cent. of the chickens died; with the carbon dioxide 22 per cent. and from the buttermilk machine 28 per cent. When we used zenoleum only 16 per cent. of the chickens died; when we used whole milk and zenoleum, it was not quite so good, it gave us high mortality. Buttermilk and zenoleum gave us lowest mortality of all, 8 per cent., even a lower mortality than with the hens. But there was only one hatch and we cannot draw conclusions from that.

We do not know how the improved vitality by using zenoleum is produced; the Bacteriological Department, as well as the Departments of Chemistry and Physics, has been assisting in the work, but they have not been able to obtain any bacterial growth from inoculation by what might be supposed to be the germs of white diarrhœa.

Q.—How do you use zenoleum?

A.—Make a 10 per cent. solution of zenoleum, and wash the whole of the inside of the machine, before setting. Take the buttermilk: We had eight hatches with uniform good results, and we are safe in drawing conclusions. Take the moisture and zenoleum and: We had six hatches, and we are justified in drawing conclusions from that. With these others that stand a little higher up than water and zenoleum, we had only one or two hatches and therefore we do not dwell so much upon them.

The top portion of the chart shows the results of a number of hens setting on earth nests, setting on straw nests, ventilated nests, roomy nests and crowded nests. Earth nests gave 52 chicks four weeks old for every 100 eggs set, about 7 chicks ahead of the best artificial method. In crowded nests we did not get as good results; the hens broke the eggs and did not seem to be at ease.

Q.—What do you mean by crowded nests?

A.—Just such nests as you find in many houses that the hens are laying in.

Q.—Were the nests small, or a number of nests crowded together?

A.—The nests were small, about 10 inches square.

Q.—What do you mean by earth nests?

A.—A large box about 18 inches square with about 8 or nine inches of moist earth in the bottom, and a very little bit of straw. The straw nests were not so good.

I would like to call your attention to another fact, and it is the percentage of infertile eggs. It seems that would be something that could not be influenced by any process of incubation, and yet we find 13.9 per cent. of eggs infertile in the wet incubator, but only 16.3 infertile in the dry machine, infertility having been greater in dry machines by 2 on 13.9 or 17.3 per cent. Mr. Dryden announces that he gets 20 per cent. better fertility in the moist machine than in the dry machine. There is in all probability the same percentage of germs in the dry machine as in the wet machine, but in the latter we have better conditions to start the germs. In the former the conditions are so opposed to nature that in all probability some germs die in the start, and these eggs are called infertile, while in reality the germs were there.

Q.—What do you mean by dry machines—hot air or hot water?

A.—Both; the dry machine is where there is no water used in the egg compartment. You can easily get what we call a wet machine. Any machine will lend itself to the placing of a large tray in the bottom: if there is not one with your machine a tinsmith can make you one, and you can keep it pretty full of water. A small tray full of water is very little good. We tried that, and we got just as poor results as with the dry machine, because the small tray did not give nearly as much moisture as we had under the hen.

Q.—In using buttermilk you fill the tray with buttermilk instead of water?

A.—Yes, and inoculate it with the germs of limburger cheese.

Q.—Should you change the buttermilk?

A.—Change it every fourth day. After the fourth day the amount of carbon dioxide liberated is very small. We said last year as a result of our scientific investigation, there is a circulation of air under the hen, and that circulation is just as great as free diffusion in the air. This year we have again proven the fact of the circulation under the hen, even much greater than in the incubators.

Examining the air under the hen we found there was 70 per cent. humidity, in the wet machine we found there was 46 per cent. humidity; therefore the humidity under the hen was nearly one-half greater than in the incubators, and yet we found the amount of moisture lost from these eggs was the same in the two cases, although the air under the hen was far from moist; therefore there is a big circulation of air under the hen. We hope to be able to measure the circulation of air under the hen, and be able to gain the seven chicks that we are short of the hen's result.

These are what I regard as the principles of incubation, viz., proper temperature, moisture, disinfection and circulation.

WINTER EGG PRODUCTION.

By L. H. Baldwin, Deer Park.

There are three sides of this question to consider. First of all there is the stock that you are to use; second the hen houses you are to house the stock in, and third the care, that is the general feeding and oversight of that stock. Undoubtedly the question of stock has a great deal to do with the number of eggs you will get. That has been shown to us by the experimental work and close observation that has been given in the use of trap nests.

The question has often been asked, "What breeds of fowl are the best layers?" It is really more a question of strain than that of breed. Then you must be careful in the strain, to maintain vigor and a good constitution. Unless your stock is thoroughly vigorous and healthy, you cannot expect it to give good results. The young stock should be raised under conditions that produce the most vigorous development. It is surprising to me at times to see chickens raised in confined quarters and small yards, where their range is very much cut down, and yet they make fair layers. Undoubtedly the more closely we can follow the natural conditions in the raising of our young stock, the better it will be. In order to produce good layers you must give them plenty of range, and they must be well fed, but they must not be left entirely to scratch for themselves, because if you do that their development will be stunted. It is well to have them raised as much as possible out in the open, with freedom to run as they will. If you want winter layers, you must have birds raised and developed sufficiently to be matured when the winter comes on, and you cannot expect that if your birds are raised late in the season.

I would say that for the American classes, such as Wyandottes, Plymouth Rocks, and Orpingtons, probably April or early in May is the better time to have these hatch, and for the Mediterranean class, such as Leghorns and that kind of bird. The later birds will come in to laying condition more rapidly. For the general utility stock—the American breeds—April is the better time to have these birds hatched, and they will be ready to lay in the fall, if well cared for.

If you want to have eggs in winter you should select your birds in September. If you put it off too late they will start to lay when they are running in their summer quarters, and it is not a good thing to change the hen's condition of living when she is laying eggs, as it is inclined to set her back. If you want to buy laying hens from some other person secure them before they have begun to lay, and then they have time to become accustomed to your care and keep before they commence to lay; and after begin-

ing to lay there is not that danger of a set back, and they will probably lay all winter. Therefore, I think it is important that your birds for winter laying should be secured and in their winter quarters sometime during September, and then when they have begun to lay, you can maintain their laying capacity all through the winter.

As to the houses in which to keep your winter layers, there is this to be considered. It is not essential that the hen-house should be warm, that is, it is not necessary to have anything in the way of artificial heat. What we must do is to retain the vigor we have secured after the careful raising of the young birds, and to do that you must have healthy conditions, and one of the essentials to healthy conditions is lots of pure air. The conditions under which hens are kept for the winter is very much improved in late years, and I think the meetings we have had here have done a great deal to bring that about.

We have constantly seen hen-houses with the windows fastened tight; the people do not expect to open them all winter long. Then the birds are taken from their summer quarters and shut up in these confined hen-houses, and the air conditions are bound to be contaminated. Hen-houses should be as dry as possible. The hen-house for winter should be built early and the roof should be complete early in July. So many people will wait and often build the house in the fall of the year, and think they are going to have them in good time for their birds. I have yet to see a hen-house built late in the year that is not damp during the following winter, and that is injurious to the healthy condition that you should have in your stock. Have windows that you can open, and allow lots of fresh air, and yet you must have them so that there will be no draft. If you keep a horse in a cold stable, you will see the coat that horse grows for the winter, and if you keep that horse blanketed in the warm stable he grows a very light coat, and I think the very same thing happens with regard to poultry; if they are kept in cold conditions in the fall of the year, nature provides them with a warm coat of feathers, and they are better prepared to stand the cold of the winter than if you keep them in the fall of the year under warmer conditions.

In the selection of your birds for winter laying, you must make up your mind that you have in your flock a considerable number of culls, and you want to throw aside a number of birds that show defects. They may not have developed quite as well as they should have done; they have had some little set-back in their growth, and they show it by lack of development; throw that bird to one side.

Having selected the birds that are well developed and vigorous, you have the best stock for the winter laying, and that is really essential in order to secure eggs in the winter.

Having secured good birds, and having housed them in reasonable hen-houses, they require fair attention.

As to feed, there is a very wide range in the feeding of hens for winter laying. When they are moved to their new quarters they may go off in their appetite for a time, and you should cut their feed down until you coax them to feed freely. They should at all times be fed meat, because that will encourage them to lay. You must remember that in the summer time they get lots of worms and grubs, and it is essential that something of the kind during the winter should take the place of the grubs.

Where we keep a small flock for household use, the scraps that come from the table contain a lot of meat refuse, and that makes the very best feed for the hens; and that is why it is that a person keeping a small flock

so often makes a better success of it than one who keeps a large flock. It is also essential to feed them generously with green food. That is a problem that is perhaps more difficult to solve during the winter time.

The most ordinary course is to keep them well supplied with vegetables, cabbages, mangels, sugar beets, or things of that kind. I have found that the mangel is the best. I do not think cabbages are as good. I think it is advisable to feed clover. Any way that you can secure plenty of green food means a great deal in the quality of the egg.

You know how we prize the butter and milk from the cows when they get on the fresh pasture land. It is the same with poultry. Vegetable matter is of prime importance in producing eggs of the very best quality. Keep plenty of straw in the hen-houses so as to give them plenty of exercise, and you will have good results. When you go to the hen-house to look at the birds, take a little grain and throw a handful down. Sometimes they are inclined to be lazy and a handful of grain will start them scratching and keep them busy, and it brightens them up. I like to feed my hens green cut bone. I do not feed much mash. I am very careful to feed only just what the birds will eat up quickly. I never allow them to gorge themselves; they have to clean the boards in five or ten minutes, and I feed a large percentage of meat in the mash. I feed the mash about 10 or 11 o'clock in the morning, then about the middle of the day, when I go there to take the birds out of the trap nests, I take a little grain with me to start them scratching again; and then about half-past four they get a good feed of grain, generally wheat or cracked corn. One of the published records of a very high laying hen was a light Brahma, and she laid 214 eggs in a year.

Q.—What is a good average for a hen?

A.—I think a good average for a flock is from 130 to 140 eggs apiece.

Q.—I know a woman who buys eggs and sets them, and she has made an average of 190 eggs per hen; she keeps about 100 hens, and they average 190 for 12 months.

A.—I think that was an exceptionally good average.

Q.—Do you think that strain has anything to do with regard to the size of the eggs?

A.—Yes, I think so. I think, also, the development of the chick has more to do with the size of the egg, but strain would have its influence.

THE COLONY HOUSE: AN ECONOMICAL AND EFFECTIVE PLAN OF HOUSING POULTRY.

By F. C. Elford, Poultry Manager, Macdonald College, Ste Anne de Bellevue, Que.

The subject the chairman has announced to you is one that I think will be interesting to a number of farmers, especially if these farmers intend building poultry houses in the future. Now, however, is not the time to build poultry houses, nor is this the time to put your laying hens into winter quarters; they should have been there weeks ago.

What is meant by colony houses? They are usually considered to be houses made to accommodate one flock, and may be permanent or movable. Colony houses at Macdonald College are built in two sizes; one will hold 25 birds and another 50 birds. I want to discuss the question to-night

under two headings, cheapness and effectiveness, because these two points go hand in hand if we want results. Is the colony house a cheap method, an economical method of housing poultry? It is cheap in the first place because of its construction. (Mr. Elford here exhibited charts showing the construction of the colony houses.) This house is 8 feet wide by 12 feet long and accommodates 25 hens. The floor is built on two runners; they may be rails, poles of square cedar, anything that you have, but the better you get the runners, the longer the house will last. 6x8 inch square cedar is as good a runner as you can get, they are placed two feet from either side an extend a foot at either end for hitching onto and drawing the house wherever you wish it. The studding is 6 foot with a double roof, it has a false ceiling made of loose boards and a little door in the gable for putting in straw. The sides are made of 1-inch sheeting planed, tongued and grooved. Any good rough lumber can be used for the purpose, battened so that it will keep out the wind and rain. The east end and about two feet out on the sides of the house is double boarded to give extra protection for the roosts. That house has in it 1,100 feet of lumber and two squares of roofing paper, and for an ordinary farmer who should do a great deal of the work himself, it can be put on his place for between $1 and $2 per hen. I doubt if many of our houses have been built for less than $3 per hen, and many of them cost $7, $8, and $10 per hen. It is too much to expect a hen to carry such a debt as that; a hen cannot pay interest on it, let alone to pay the principal. The cheaper we get our houses, the better the result. These colony houses are cheap and simple and any person can build them. The scantlings that form the roosts go out on two bars that extend out from the wall on which they are hung, and we let them down at night, and when we go around in the morning we hook them up to the wall because we do not want to encourage loafing among the hens. We have movable nests and a hopper for feeding and also another hopper for grit and a dust box. Everything is movable, and everything is simple; any person can make them. There is nothing complicated about it, and it is very cheap and does not require fencing. In a great many of our poultry houses fences cost more than the houses. These houses are hauled out to the fields in the summer time, and if you have to put them close together, it is well to have a little temporary wire fence that you should run around them to keep the hens in until they become used to their home, and in about six or seven days you can take that wire away.

Q.—Is there any floor in that colony house?

A.—Yes, we make them with floors because it is handy to haul them around; we simply shut the hens up the night before, and hitch a horse on in the morning, and when the hens get out in the morning they have moved.

Q.—Will one horse haul that?

A.—It takes two Quebec horses; one Ontario horse might. If you have an orchard and lots of apples coming down, you can hitch your horse to the house and take it into the orchard and let the hens run there as long as there is any feed for them, and if you have a pasture field or a wheat field you can run it out there after the harvest. We all know how much grain goes to waste in a stubble field.

Then, it is cheaper from another standpoint, and that is labor. I do not say that a man could attend to 100 laying hens in four colony houses scattered over the fields, cheaper than he could if they were in one continuous house; but the colony house lends itself to a system of feeding that requires less work. There is no reason why we should not put the hoppers in and feed them once a week. I will admit that the hopper system of feeding poultry under every condition is not a success, but I know that the hopper

system under proper conditions could be made a success, and here are suitable conditions. This year our hens had free range, and I found that they didn't gorge themselves with grain. It was surprising what little time they spent in the colony house eating; they would take what they wanted, and then they would go out and hunt for something that was not there. I claim that there is less labor involved in the colony house system than in the old system from the fact that we can feed our hens with less labor by utilizing the hopper system of feeding. There is less labor in it from another standpoint, I am told that in England the farmers pay the poultry men so much per colony house to put them on their farms on account of the fertilizing element, and that is something that is certainly worth looking after. We clean the houses out in the summer time once a week, and in the winter time, once a month,, and any person that has been in our colony houses can tell you they were not able to say whether they were there the day before they were cleaned or the day after. We simply clean out the part of the floor that is under the roost once a week in the summer time and once a month in the winter time.

Q.—Are these colony houses effective?

A.—In the spring when we want to get sunshine for our hens we can get it by running our hen houses to the sunshine, and in the warm weather when there is too much we can run them into the shade under a tree in an orchard, and if we have not that shade, we simply put a block a foot high under each of the four corners, and we make a cool shady place under the hen house, and we never have any trouble in keeping our hens comfortable in the warm weather.

We have winters at Macdonald College that are very cold; we had it 28 to 30 degres below zero for days at a time, and in addition to that, there prevails a strong east wind; yet there is not a day in the winter when our hens were not perfectly comfortable and laid eggs. We could get plenty of fresh air by opening up the windows, and there were only three days last winter that the houses were not opened up some time during the day.

Hens stand considerable cold. A healthy hen can hardly freeze, but the moment you get a hen that is not healthy then they freeze very rapidly. We had the thermometer down to 18° below zero inside the house, and there was not a frozen comb in the house. We had only the utility breeds. I do not know how the large comb breeds will stand it, I will know better next year.

The house is always dry; no frost accumulates on the wall because it is well ventilated, and we have no trouble with dampness.

Q.—Do you set that house on a foundation for the winter?

A.—As soon as the winter comes on we bring them up near the feeding house for shelter and convenience, and bank them around with snow.

Q.—Do your windows swing or slide?

A.—Slide.

Q.—Do you have curtains in front of the roosts?

A.—Yes; they are let down only on the colder nights. That curtain will make a difference of probably from 6 to 8 degrees in the temperature.

If the hens simply do not freeze, the house would not be effective. The proof of the pudding is in the eating, and the proof of the house, other things being equal, is in the eggs, and that is one of the surprising things that presented itself to the visitors.

We had about 230 hens last winter; they only averaged 122½ eggs in eleven months; but what I want to call your attention to is this: 230 hens laid 28,314 eggs in eleven months, or an average of 2,500 eggs in a month—

that is, for the whole year right through; but the 230 hens for the four months, December, January, February and March, gave us 10,347 eggs, or 2,587 eggs a month. That is, they averaged more eggs in the four winter months than they did in the rest of the year. The hen that lays in the winter is the hen that pays. The whole revenue from these hens was $887; for the winter months $431; and for the other months $456. There was nearly as much revenue from the sale of the eggs during the four winter months as all the rest of the year. The net revenue, by simply taking off the cost of the feed, was $582.74 for the eleven months, or $329.24 for the four months, as against $262.50 for the other seven months. They averaged $2.52 each for the eleven months, and they netted $1.38 each for the four months, as against $1.14 for the seven months.

Q.—What is the feed in the winter time?

A.—This hopper contains dry bran; that is before them all the time. The little hopper contains beef scrap; grit and oyster shell. Once a day, between half-past two or three o'clock, they are fed grain in the litter. That grain consists of anything we can get; feed is very dear with us.

Last year we fed two parts of oats, two parts of wheat, and the other parts made up of barley, corn, buckwheat, or any other grain that we could get to make a variety. We fed about three quarts a day to twenty-five hens. Just about an hour before they go to roost they get a full crop of grain, and when they get up in the morning there is still grain in the litter, and they scratch away all day long, and they get a mangel or turnip each day.

If there is any grain in the litter when feeding time comes, we do not feed them too much, but I should like to see the hen get something whenever she scratches for it; because if she scratches and does not find anything, she gets discouraged and sits down, and I do not want a hen to sit down in the day time. If we find there is no grain in the litter, we put in a little more. We do not give them any water; they eat snow. We get as high as 100 per cent. of fertility; the average was 92 and the lowest 87;—not hatchability, but fertility. We only hatched about 50 per cent. of the total eggs, but we only lost 12 per cent. from the time they were hatched till they matured.

THE IMPROVEMENT OF ONTARIO'S PASTURE CROPS.

By C. A. Zavitz, B.S.A., Professor of Field Husbandry, O.A.C., Guelph.

I consider this a very opportune time to speak about the improvement of the pasture crops of Ontario. It is during the winter season that we should make out plans in connection with the operations of the farm for the coming season. I doubt if there is any more important subject which could be discussed by this collection of Ontario stock men than that allotted to me for introducing at this time. I do no expect to go into the question in an elaborate way, but I hope to refer to some exceedingly important points in connection with Ontario's pasture crops, with the hope that a valuable discussion may take place. In fact, I hope that nearly the whole of the time will be devoted to discussion on this important question.

Let us look for a moment at the position which the pasture crops occupy in the agriculture of Ontario. In examining the statistics of the Province, I find that if we take into consideration the last twenty years and divide this time into two periods of ten years each, for the sake of comparison, we find that during the first period, the area devoted to pasture crops in the

Province was almost constant, the increase being about 190,000 acres for the whole period, or an average increase of 19,000 acres per annum. During the past ten years, however, the pasture lands of Ontario have increased considerably more than one million acres, or an average of about 140,000 acres annually. We now have over six million acres of grass land in Ontario. We scarcely realize that about one-half of the cultivated land of this Province is now down to grass, and that the pasture land is being added to every year at a rate of about 140,000 acres. If we take into consideration the last five years, we find that there is an increase of 570,000 acres of pasture land and 503,000 acres of hay land, making an increase of over a million acres of hay and pasture in Ontario within a period of five years. The crops which are being increased to the greatest extent in Ontario at the present time are, 1st, pasture; 2nd, hay; 3rd, oats; 4th barley; and 5th, mangels.

While it is true that the areas devoted to pasture lands in Ontario have been increasing rapidly during recent years, it is certainly true that the quality of the pasture produced on those lands has not been improving at the same rapid rate. I believe I am safe in saying that the quality of our pasture lands, taking the Province as a whole, is not as good at the present time as it was ten years ago. The statistical reports inform us that in the average of the last ten years we obtained about one-fifth greater yields of barley, oats, and wheat per acre that we did in the ten years previous. It therefore behooves the Ontario farmer to look into the matter very carefully and seriously consider the improvement of his pasture crops. Formerly, it was the general custom to seed down with grain crops, either clover alone for one year's hay or pasture, or with timothy and clover for two years' hay or pasture. At the present time, however, owing to scarcity of help, etc., the fields which are seeded to timothy and clover often remain in grass for three, four, or five years, or sometimes for a longer period before they are plowed. The clover largely disappears after the first year. Timothy forms fairly good pasture in favorable seasons, but in a hot, dry summer, the results from timothy, as a pasture crop, are unsatisfactory. During the last four or five years previous to 1907, we had rather more than the average amount of rainfall during the six growing months in each of the summer seasons, and we therefore obtained fairly good results from the old timothy sods. Last year, in many parts of the Province, the rainfall was comparatively light and there was almost a pasture famine. This is what I naturally expected from the character of many of the pasture fields. I sincerely hope that something will be done very soon in the use of better pastures throughout the Province.

Permit me to present the subject of pasture crops under the three following headings:—(1) Pasture crops for one year, (2) Pasture crops for two, three, four, or five years, and (3) Permanent pasture crops.

Pasture Crops for One Year. Farmers frequently write in the spring of the year, stating, that through lack of germination of the grass and clover seed, the killing of the plants by the hot, dry weather of the past summer, or the heaving of the clover in the early spring, the pasture crop is likely to be deficient in the coming season, and they ask what they could sow in the spring of the year that will furnish the best pasture in the same season. In each of five years, we conducted an experiment in testing fourteen different kinds of crops for the production of pasture in the same season in which the seed was sown. As a result of these experiments, we found that we got better returns from a combination of varieties than from any one variety sown by itself. The following mixture, when sown in the spring, has usually been ready for pasture in about six weeks after the seed was sown, and has given good satisfaction in furnishing pasture throughout the sum-

mer: Oats, 51 lbs., (1½ bushels by weight); early amber sugar cane, 30 lbs.; and common red clover, 7 lbs.; thus making a total of 88 pounds of seed per acre. Not only have we tested this mixture carefully in our small plots, but we have also sown seven and eight acres in each of two years and have pastured the crop with steers, with good results, both in the amount of pasture material furnished, and by the condition of the steers during the summer months while they were on the pastures.

In 1906, we placed seven steers on seven acres of annual pasture and kept them there constantly from the time they went on the land, early in June, until they were removed from the pasture to enable the land to be plowed for winter wheat. The seven steers, however, were unable to keep the pasture down, and for four days a college herd of cattle, numbering twenty-three, were also pastured in the field.

In the past year, about eight acres were sown with the annual pasture mixture. Owing to the unusually backward spring, the crop was not ready for pasturing until about seven weeks after the seed was sown. At first, six two-year-old steers were turned into the pasture, and after about a week, five other steers were also placed in the same field, making a total of eleven steers on the eight acres. The animals made excellent progress on the pasture until it was necessary to plow the land for winter wheat.

The mixture here referred to gives a continuous growth of pasture, the oats being the earliest to produce pasture, and the early amber sugar cane giving good satisfaction in producing a considerable amount of growth in the dryer and hotter part of the summer, and the red clover making it best growth a little later in the season. In every instance we have been enabled to secure an excellent catch of red clover, and believe it to be even a better system for getting a catch of clover than the usual method of seeding with a grain crop, and particularly with oats. I am not recommending this mixture for ordinary pasture purposes, but if any one wishes information as to the best crop to sow in the spring of the year to furnish a pasture in the same season, particularly for cattle, I do not know of anything which is likely to give better results than the mixture here given.

Pasture for Two Years or More. In connection with the short rotations on many farms throughout Ontario, I would advise the addition of some other seed than Common red clover and timothy, if the crop is to be used principally for pasture purposes, and particularly if there is a possibility of leaving the land unbroken for more than two years. As mentioned previously, the red clover mostly disappears the first year, and the timothy does not give a very satisfactory pasture in hot, dry summers. The following mixture would likely be rather superior to red clover and timothy alone in each of the first two years, and decidedly better should the land remain for a longer period of time for pasture purposes: Red Clover, 5 lbs., Alsike Clover, 3 lbs.; Timothy, 3 lbs.; Meadow Fescue, 3 lbs.; and Orchard Grass, 3 lbs., making a total of 17 pounds of seed per acre. If it is difficult to secure both the Meadow Fescue and the Orchard Grass, six pounds of one instead of three pounds of each of the two might be used. Mixtures somewhat similar to the one here mentioned have been used in the large fields on the farm proper at our Agricultural College with excellent satisfaction.

Permanent Pastures. The scarcity of labor and the great development of our live stock industry are factors which are causing some of our most thoughtful farmers to consider the advisability of securing a first-class permanent pasture instead of relying so much on timothy for pasture purposes. Fields which are located long distances from the farm buildings or which are difficult to work on account of the presence of steep hillsides,

crooked rivulets, low spots, etc., might be converted into permanent pastures and thus made into areas of great economic value. This arrangement would not interfere materially with the regular crop rotation of the farm. From more than twenty years' work in testing different varieties of grasses and clovers, both singly and in combination, I would suggest the following mixture for permanent pasture on an average soil in Ontario: Alfalfa, 5 lbs.; Alsike Clover, 2 lbs.; White Clover, 2 lbs.; Meadow Fescue, 4 lbs.; Orchard Grass, 4 lbs.; Tall Oat Grass, 3 lbs.; Meadow Foxtail, 2 lbs.; and Timothy, 2 lbs.; thus making a total of 24 pounds of seed per acre. These varieties are all very hardy. Some of those used in Great Britain are not permanent in this country. None of the smaller growing varieties, such as the blue grasses and the bent grasses are mentioned, as there is scarcely a farm in Ontario in which the Canadian Blue Grass, the Kentucky Blue Grass, or the Red Top will not grow naturally. The varieties here recommended are strong, vigorous growers. Some of them produce pasture very early in the spring and others later in the season. Most of the varieties are superior to timothy in producing a growth during the hot, dry weather which occasionally occurs in the months of July and August. The seed can be sown in the early spring either alone or with a light seeding of spring wheat or of barley. Such a mixture as this when well established on suitable land should furnish a pasture, abundant in growth, excellent in quality, and permanent in character.

Q.—Would the mixture referred to for annual pasture purposes be suitable for fowls?

A.—I have not thought of it from that standpoint; I think probably it would. The fowls, however, might pick out the very young clover plants before they could make much growth.

Q.—Would the annual pasture mixture be good for a swampy soil?

A.—I do not think it would be as suitable for a swamp soil, because the sugar-cane would not thrive as well as on a warm, dry soil.

Q.—What area did you use?

A.—About seven acres each year.

Q.—Would the Early Amber Sugar Cane be better than corn?

A.—The Early Amber Sugar Cane is greatly relished by farm stock, and it seems to be a valuable pasture food. It will stand the dry weather much better than corn, and it will also stand pasturing better than corn. The more you pasture the Early Amber Sugar Cane the more it grows.

Q.—How would that do for hog pasture?

A.—I believe it would do fairly well as a hog pasture. I think, however, I would prefer to put in some rape and some peas or vetches for the hogs. Rape makes a very good hog pasture.

Q.—How would the mixture do for plowing up the next spring?

A.—It would do very well, because there is usually a regular mat of red clover. We made an investigation of the root development at the end of the season, and we found a large amount of roots. The clover roots were down several inches.

Q.—What is the nature of your land?

A.—Average clay loam.

Q.—How would it do to plow up an old pasture sod and put this mixture on?

A.—I do not see why it would not work fairly well, unless the wire worm would get some of the plants.

Q.—Will it stand the winter?

A.—Yes, the clover will usually stand the winter. Of course the oats have all disappeared by early autumn, and the Early Amber Sugar Cane has

mostly disappeared by the late autumn and your land is nearly all covered with clover. You can use the clover in the following year as a green crop, for hay production, or for any purpose you wish.

Q.—Do the cattle make good gains on it?

A.—Yes, very good indeed: the animals gained about 140 pounds per head; we weighed them twice when they went in and twice when they came out.

Q.—How long were they on that pasture?

A.—They were on the pasture about two months and three-quarters or 85 days from the time the pasture was ready, until we wished to use the land for plowing for fall wheat.

Q.—When do you turn them on first?

A.—We usually turn them on six weeks after seeding, which is about the middle of June. Last year being a cold, wet season, it was about seven weeks. If we sow about the first of May, then we are able to turn them on about the middle of June.

Q.—How would it do for dairy purposes?

A.—I think the pasture is particularly good either for dairy cows or for steers.

Q.—How would it do to substitute alfalfa for red clover?

A.—I would not favor it in a mixture of this kind, because red clover gives very good results, and alfalfa being rather tender in its growth the first year, would likely be killed by close grazing and by tramping.

Q.—Do you think the ground would be suitable for fall wheat without manuring?

A—We manure once in four years, and we always manure with the cultivated crops, such as potatoes, roots, corn, and rape. During each of the past two years we have followed the pasture crop with fall wheat.

Q.—Can the second mixture referred to be sown on fall wheat?

A.—Yes, but you would have to sow it by hand in the spring.

Q.—Would you prefer sowing Orchard Grass in the fall or the spring?

A.—We have sown it both in the fall and the spring, and we have obtained good satisfaction from both. In the case of red clover or alfalfa or alsike clover, however, we have not obtained satisfactory results when sown in the autumn. If the clovers are sown with the winter wheat, and the young plants are well protected by the wheat, the crops sometimes do fairly well, but it is not a very safe method.

Q.—Can you give us an idea of the cost of seed of the permanent pasture mixture per acre?

A.—I cannot at the present time; it would probably be in the neighborhood of $5, but the prices of the seed change from time to time.

Q.—I have a couple of fields with a good deal of black muck; what would you advise seeding them down to?

A.—I would drop the five pounds of alfalfa and put in two or three pounds of red-top instead. It is one of the most suitable grasses for low, mucky land.

Q.—Did you top dress these crops?

A.—No, not during the eleven years, during which time we had the permanent pasture.

Q.—Did you ever experiment with the *Bromus inermis*?

A.—Yes, we have grown the *Bromus inermis* or the Hungarian Brome grass for a number of years, but we have not yet felt justified in recommending it for Ontario.

Q.—How much red-top would you put in the place of alfalfa?

A.—I think about three pounds.

Q.—Would the permanent pasture mixture make a good hay crop?

A.—It is impossible to cut all the varieties at the very best time for hay production. If the crop is cut early, however, it gives a large yield of hay of very good quality.

Q.—How many cuttings did you have?

A.—We had sometimes two and sometimes three cuttings a year. In the eleven years we had a total of twenty-six cuttings.

Q.—Do you sow that mixture with a nurse crop or by itself?

A.—It can be sown either with or without a nurse crop. If you sow a nurse crop, one bushel of barley per acre is one of the very best that can be used.

Q.—Can you get these seeds from the seedsmen in Toronto?

A.—Yes, but I would advise you to first get samples and examine the seed, and order from the samples. Buy the different varieties separately.

Q.—Is Orchard Grass relished by the stock?

A.—It is apt to grow a little coarse, but is relished by the animals fairly well. It would have been relished in Ontario this past summer.

Q.—Would you recommend the permanent pasture mixture for dry, sandy land?

A.—It would likely give a fairly good pasture in the summer where timothy would sometimes furnish practically no pasture at all on dry, sandy land. I would increase the alfalfa somewhat.

Q.—Does alfalfa make a good pasture crop?

A.—I would not recommend alfalfa alone for pasture, for cattle or sheep, but would do so for hogs. I would, however, sow it in a permanent pasture mixture if the land was not wet.

Q.—In a soil favorable for alfalfa, does it not have a tendency to crowd out the other crops after a few years?

A.—No; the alfalfa has an upright growth and does not have a crowding habit. With the quantity I have given here, it would not crowd out the other crops under ordinary conditions.

Q.—Have you tried alfalfa with the other crops as a mixture for hay?

A.—Yes, we have. Alfalfa and tall oat grass stand at the top of the list in yield of hay. I would, however, prefer alfalfa alone for hay production.

ADVANTAGES OF THE SPECIAL SEED PLOT AS A SOURCE OF SEED.

By J. M. McCallum, Shakespeare, Ont.

I am sure we have all listened with a great deal of appreciative attention to the very able address, supplemented by practical experience, which has just been given by our worthy friend, Professor Zavitz.

The improvement of our live stock and farm crops should go hand in hand, because the improvement of our live stock will be made greater if our crops are improved The growing of grain is engaged in by almost every farmer, and in some parts, large areas are devoted almost exclusively to the growing of grain. It speaks well for the future of Ontario agriculture when we find a discussion of plant husbandry upon the programme of addresses to be given at the Winter Fair. Among the many branches of practical agriculture few if any, are deserving of more attention, or could be more profit-

ably improved, than the growing of purer seed for our farm crops. No matter what line of farming is followed, the growing of grain is engaged in on almost every farm, while in many parts of the Dominion grain growing is the principal occupation. Canada is so pre-eminently adapted for farming, and such large areas of it are devoted to the growing of our cultivated grains, that any means for improving the quality and increasing the yield thereof should attract our close attention.

In past years at the Winter Fair the great importance of a supply of pure seed-grain has been kept before the farmers who have attended the addresses given in this lecture room. Previously most of the addresses on "seeds" have been given from the standpoint of the Canadian Seed Growers' Association—that Association which is taking the lead in the work of organized improvement in seed-grain. To-day I am taking up the work from the standpoint of a seed-producer and seed-user, which is the practical application of the work advocated by the Association; and I shall endeavor to show the really great importance of the work when considered from the farmers' standpoint. We very often find that improved methods in any line of farming are at first looked upon with suspicion by farmers, and that it usually takes a number of years before they are generally adopted by the farming public. In one sense this is a wise course on the part of the farmers, but I think that the farmers of Ontario are just a little too conservative in experimenting with new ideas.

"Be not the first by whom the new is tried,
Nor yet the last to cast the old aside,"

is a motto which might very well be entwined into the practice of advanced farming.

During recent years several methods have been used for increasing the yield of our crops. We have all experienced the unpleasant results of the presence of smut in our crops, and the discovery that this fungus disease is very thoroughly combatted by treating the seed with a solution of formalin, has been of very great advantage to farmers, and has materially increased their returns. Again, the discovery that intelligent spraying with Bordeaux mixture will assist in the prevention of blight on potatoes has proven of great advantage in the growing of this crop. But great as are the benefits derived from these preventive measures, there is yet a very simple means of further increasing the yield of our farm crops. I refer to the use of the special seed-plot, and the hand-selection of plants—a system which means improvement from the very foundation of the grain-growing industry.

Strictly speaking, farmers have always paid more or less attention to the procuring of their seed grain. Some have considered that by cleaning a portion of their own general crop two or three times with their fanning mill they have done all that is necessary. Others save a portion of seed from the best field. Others save the seed from the best part of the best field; while still others depend upon a change of seed from some other farmer as their supply for the next crop. Now, all of these methods were all right in their day, and certainly must have resulted in improvement, but in order to keep abreast of the progress in other branches of practical agriculture, we must resort to some advanced system of improving our seed supply. The best and most satisfactory method we know of to-day is by the special seed-plot in conjunction with careful and timely hand-selection of the best heads from the strongest plants—which means a constant improvement from year to year.

The seed-plot system, as a source of seed, is very simple in detail. The beginner, having selected his variety, procures a sufficient quantity of seed

to sow at least a quarter of an acre of ground, which should be in a good state of cultivation and as free as possible from weeds. In sowing the seed on this plot it is well not to sow too thickly in order to secure good, full development of the plants. Some growers follow the plan of sowing only from every second spout of the seed-drill. This plan has to recommend it the fact that it allows more chance for the selection of heads at harvest time, and allows for fuller development of the plants in the rows. Next comes the selection of plants, which is done at harvest time, while the crop is still standing; and let me here say that it is really the most important stage of the whole work. The grower must first have an ideal in his mind. He must decide what type of plant he wishes to perpetuate, and carry on the work of selection accordingly. Keeping this ideal in view, he should select from the strong, vigorous, healthy plants such heads as are superior to the surrounding heads without having been grown in more favorable conditions. This starting point once secured, all progress lies in continued selection. The number of heads selected should be sufficient to furnish enough seed to sow the quarter-acre seed-plot next year. If time and help permit, it is well to have an extra quantity of seed, to avoid losing well-bred seed in case of one year's failure of crop. The remainder of the crop on the plot will furnish improved seed for the general crop on the farm. The objects of this system are two-fold. Firstly, to develop and maintain a high-class strain of seed adapted to the conditions existing on the grower's farm; and, secondly, to keep up a supply of pure seed for the grower's own use.

One objection which might be raised to following this system is the amount of time taken up in the work of hand-selection in these times of expensive farm labor.

When we consider the performance of results and the increase in the average yield and quality of our grain crops, and the consequent increase in monetary value, this objection sinks into insignificance. Half a day's work for two men will be sufficient to secure all the hand-selected heads necessary for furnishing the seed for next year.

Following are the chief advantages of the plan:—

1. Insures trustworthy basis for supply of pure seed.
2. Increases average yield per acre—best heads selected. Like begets like.
3. Reduces the work of grain-growing to a science.
4. The simplicity of the system commends it to every farmer.
5. Increase in financial returns adds to the prosperity of the farming community.
6. The commercial aspect of the question.
7. People will pay high prices for guaranteed pure seed.

HILL SELECTION OF SEED POTATOES.

By T. G. Raynor, B.S.A., Ontario Representative of Seed Branch, Ottawa.

With regard to the noxious weeds introduced through importation of wheat from the west, I may say that we have no law covering that point. But those of us who are interested in keeping out the weed seeds, have taken it up in the press, and Mr. J. Lochie Wilson, who has been up to Port Arthur

and Fort William recently, reported what he saw. There was a lot of wild oats, and a large number of other weed seeds comprising between 15 and 20 per cent. of some of the stuff he saw. I think the matter should be laid before our Legislature and a law should be passed so that the standard of purity will affect not only the seed that comes down for milling purposes, but seeds that are sold to farmers for feed. I do not understand why that miller should have got that weed seed. I think it must have been penny cress, because I do not think skunk grass would be in wheat. It is a small seed with a considerable amount of awn and could be easily cleaned out, and I do not understand why that miller did not clean it out of his wheat if that were the one. If he had done so, he would have had a better sample of flour. Wheat imported from the North-west for feed, should be ground before it is fed, and that will help to keep down the spread of noxious weeds.

With regard to the potato problem, I want to tell you that they are planning in one of the States of the Union to have a five day course in discussing the potato alone, so that we have abundant material to supply us for at least a half-hour discussion. I did not know that there was so much in the potato question until I began to read it and discuss it. The potato crop is bringing a large amount of revenue to the country. I was surprised to find out that the production of the world's output, was 4,500,000,000 bush. Of course a great many of these potatoes are used in the manufacturing of alcohol and starch. The question I am to discuss with you is the production of potatoes for the purpose of food.

I can heartily endorse all that has been said as to the improvement of our seeds, by Mr. McCallum. He is one of the best members of the Canadian Seed Grower's Association, and he has taken great pains in the improvement of corn and wheat, and he will likely take up other seeds if he has time. Sometimes our potatoes are left in the cellar, and not brought out into the light, and are allowed to sprout, which weakens the seed. In the sunlight they make a strong, thick sprout, and there is a better supply of seed from which to select when we get ready to plant. Some people save only the small potatoes for seed, and that is not a good practice, unless they are small from normal conditions. Of course, some seasons the potatoes do not get a chance to develop fully. There are some thirteen points with regard to the potato that are worthy of consideration. Mr. Zavitz is the authority for telling us that the largest yield of potatoes comes from planting the largest seed potatoes. He does not say that it is the most economical source, but rather favors the medium sized potatoes, and cutting to one or two eyes. Whatever our selection is, we ought to have some definite way. When potatoes are a high price, it might not pay to use the very large potatoes for seed.

In the season when potatoes are low in price, it would certainly be a great advantage to take the larger sized tubers for seed purposes. The system we have in the Canadian Seed Growers' Association, is to make the selection uniform. If you go out into the field and see a strong rank growing hill with strong stocks, and in every way showing vigor and vitality, plant a stake beside that hill. I would plant about 150 stakes in order to make my selection. When you come to dig these potatoes, take out these 150 or 200 hills you have staked and select the best hills, those that have got the largest number of tubers and of uniform size. Those that have a lot of smaller tubers should be discarded. Uniformity is one thing we are aiming at. Select 25 of the best hills out of the 150, and keep the product of these hills in individual sacks, and next spring when you get your ground ready to plant, we ask you to take eight potatoes out of each hill; there-

fore you would not select any hills for your purpose that had less than eight potatoes in it; it would be better to have 10, so as to have one or two to play on.

We ask you to plant the product of each hill in a row eight hills deep, so that you can follow up the history of individual hills, and should one potato in any hill seem to give perfection, you can take that individual potato and follow it up as a progenitor of future stock.

It is a law in nature that like breeds like, and the same laws are in operation in connection with our crops, as obtain in stock improvement, and we can expect to continue to improve right along and hold it there after we get it to a state of perfection.

Professor Hays says that the potato properly selected in some such way as this, will retain its vitality for about thirty years, and that is good enough for the ordinary man, and it is worth while, because there is a large amount of money comes from the potato crop.

You can see from this chart that the lowest row produced 62 potatoes, and the highest one 127 potatoes. We also want to try and get a variety that is free from disease, and that is well up in productiveness. There is a great difference in varieties in these respects. When you undertake to select potatoes from the breeding plot, you should be careful to select only the very best.

I have here before me a number of potatoes, and in the first place I want to show you a good sized potato. You will notice that this one is irregular; evidently, it has received crowding in the hill, very likely the ground was too hard at a certain stage when this potato was developing. The best soil for potatoes is sandy soil; we can do a lot to improve potatoes by putting the soil in proper condition.

If you want to see if the potato has good quality for eating purposes, you should cut it in two, and you will notice some spaces of a sort of watery color, medullary rays, larger in the centre, and ramifying out towards the outside of the potato, and the potato that has these medullary rays large and open is the poorest; they are not so good for cooking. We want a potato to be as solid as possible with the starchy particles lying closely together, obliterating the medullary rays. There is a popular notion that the potato that is a sort of a russet color with roughish skin is the best, and I believe that is the case. It is said that there are certain varieties that, if you store them for a while, will develop this roughness on the skin. Certain markets discriminate against potatoes on account of their color, and the potato grower should find out what they want in the market he is going to cater to, and make his selection accordingly.

You will notice there is a great difference in the depth of the eye in these potatoes; you will see that this one has a very deep eye, and in order to obliterate this eye, a very heavy peeling will have to be taken off. We should select the potato that is shallow in the eye. There are two or three different shapes in potatoes, there is an oblong shape, the kidney shape, and the oval shape.

Mr. Newman was good enough to bring up some samples of potatoes grown in the Maritime Provinces, and in Toronto they will pay 10 cents a bag more for the New Brunswick potatoes than they will for Ontario potatoes.

The Ontario grower used to have all this Toronto market of three or four thousand bags a day, now 80 per cent. of it is supplied with potatoes from the Maritime Provinces. Potatoes they send up from New Brunswick are uniform and well selected. They do not put in half a car of one size and

half a car of another: because it would destroy their value in the Toronto market. They grow potatoes of the same kind in the same community to a large extent, and have them as near as possible all the same size and shape and color when marketing, and when the Toronto dealer gets the car load it is uniform, and he has no trouble in disposing of them.

I have here a few potatoes that were grown in the Ottawa valley. There is a potato called the Maggie Murphy; it looks nice, but it is not very good in quality.

Q.—Suppose in one of the hills you have only four or five good sized potatoes?

A.—That would prove to me that if I planted these potatoes another year, they would have a tendency to produce hills with four or five potatoes, and that would not be enough to suit me, and I would prefer to make my selection from potatoes that were not too large in size, and were uniform and that would give a better yield.

Q.—Would you plant in hills?

A.—As far as this experimental work is concerned, we certainly want it in hills; we want to give each hill plenty of room so that the roots can ramify in the soil. To get the best results it is not necessary to plant in hills, but it is necessary to give plenty of room for the roots. The best practice is to plant in rows three feet apart, and fifteen inches in a row.

Q.—Do you cut potatoes in two for planting?

A.—These potatoes cut in two, I consider would give two good pieces.

Q.—Do you leave all the eyes in?

A.—It does not matter about that at all; experiments have been conducted to try and determine what effect that has, and it has been found that all eyes do not produce stocks; when the potato is planted whole or in pieces, it appears to have power to send out individual shoots strong enough to overcome weaker buds which die shortly after starting.

Q.—Are there any blight proof varieties?

A.—None that I know of, but there are some that are more blight resisting than others.

Q.—There is a blight proof variety advertised at a high figure?

A.—There are a great many things advertised at high figures that do not always pan out.

Q.—Is it better to have the potato mature is a short time or in a longer time?

A.—That is true with regard to the early varieties and perhaps even in the later varieties. It is a good thing to have them mature and ripen just as early in the season as possible. I would favor selecting from the variety that would mature a little on the early side even if it were a late variety.

Q.—In countries where they take longer to mature they are coarser and have not as much starch.

PROF. ZAVITZ:—Some of our best varieties mature late.

MR. RAYNOR:—You must have a potato that matures before the frost comes; it is just as necessary that the potato should mature before the frost as any other crop.

There is a most useful article published in the last *Farmers' Advocate*, where the results of experiments are given at the college and other places, and you will see the varieties that stand highest in the experiments conducted by Professor Zavitz, and also at the Dominion Experimental Farm; you can also get that information in the reports from the Experimental Farm at Ottawa, and the Agricultural College at Guelph.

PROF. ZAVITZ: In our own experiments, Empire State has been found to be the best. Burpee's, and Extra Early, and Rose of the North and Early Fortune, are some of the best early, and Early Eureka is also a good potato.

Q.—What variety is that large potato?

A.—It belongs either to the Rural New Yorker No. 2 or Carmen No. 3; I think the exhibit of Ontario grown potatoes here compares very favorably with the New Brunswick potatoes; of course down there they have a climate particularly adapted for growing potatoes.

GOOD ROADS RIGHT NOW.

BY D. WARD KING, MAITLAND, MO.

I cannot express to you the pleasure that it gives me to be with you this afternoon, and to know that we are to do what we can to follow up the campaign for good roads that has already been started by the *Farmers' Advocate* of London. I heard a gentleman say since twelve o'clock that he was surprised so many farmers could get into town. He was judging by the appearance of the roads. Therefore I have authority for saying that you have not "Good Roads Right Now."

I learned by a talk with Mr. Campbell, Deputy Minister of Public Works, and who has charge of the road system in the Province, that you, here in Ontario, have about 25 per cent. of what we know as hard surface roads. That is, for every 25 miles of hard road you possess, you have 75 miles of native soil roads. The problem then is largely one of treating the native soil. I come to you this afternoon with a very simple remedy for bad roads which I hope you will not turn down merely because it is simple. Do you know that some of the simplest things in the world are the greatest, and that some of the most simple things in the world are the hardest to understand because of their simplicity.

Farmers are familiar with the old illustration of turning a goose, a sheep, and a horse out to pasture and letting them manufacture feathers, wool, and hair. It is done by the simple process of eating the grass. The simplest things in the whole universe are things we know but cannot explain. Who knows what electricity is? Ever since Benjamin Franklin sent a kite into a thunder cloud and held an iron key in his hand, we have known of electricity. How many years did we do without a telephone because we did not know that by the making and breaking of the electric current at one end of a wire a thousand miles long we could make and break the current at the other end of the wire, and that this act would move a diaphragm and enable us to understand the voice of a friend.

The question of good roads is so big that I hesitate. I came through Michigan on my way here and the folks over there are just as smart as you Canadian folks. I do not live in Michigan, but two years ago when I was scheduled for a two weeks' trip through that State, they covered their roads with two feet of snow before I got there and kept them covered all the time I was in the State. You folks are just a day late. (Laughter.) I got a glimpse of your roads yesterday afternoon as I came over from the American side, and the first road I saw in Canada was this side of Sarnia, a road that crosses the Grand Trunk Railway. I am satisfied that if by some magic that road could be moved to-night it would cost $10,000 a mile to put it back. I

take it that this Sarnia road is from six to eight feet above the level of the surrounding country. It is probably twenty feet wide, but it is imperfect, and it might be made almost perfect at less expense than is now put on it year by year. This fine road is almost flat. What it lacks of being flat is a depression in the middle that ought to be reversed. I could look down that road a quarter of a mile and saw that it was mud and water all the way. The water has no chance to run off. The road has hips on it, and it is cheaper to work the road so as to take the hips off than it is to leave them there. The hips force the water to go to the end of the road before it can get out and that keeps the road in bad condition. If we want to have good roads we must get them to dry quickly. Whether a road is a gravel road, a mud road, or an asphalt road it ought to have these three characteristics. It should be oval, hard, and smooth. We cannot get away from any one of these without spoiling the road. I do not know which is the most important. It is so absolutely necessary that these three things be present at the same moment, that for the life of me I cannot say which one comes first.

Now the simplest manner of securing a hard and smooth earth road is to use the split log drag. It does things that no other implement will do. The split log drag does things cheaper than any other implement. Any man with an axe and a two-inch auger can make a split log drag that will help the road 100 per cent., and a twelve-year-old boy can use it. I know this because we in Missouri are using the drag where we have to put two children on it to manage the team. The postmaster in one of our Missouri towns got enthusiastic over the King drag, and hired a man to make a dozen; they cost 75 cents each, the price of a good jack-knife. I gave a $50 prize to a man near Oregon, Miss., for making the best road in a contest. His prize road was built with a drag built from a deserted and decayed log cabin. The owner had fixed the edge with what we call stalk cutter knives. A farmer in Iowa showed me a drag made out of a willow which he said cost him just eleven cents. I am telling you these things in order that you may comprehend that you may have good roads right now. You need wait neither for time or money. You don't have to wait for somebody to come and make something for you. Go home and make a King split log drag; hitch a team to it and make a boulevard.

I have lived on one farm twenty-nine years. I waded through the mud seventeen years before I found out how to make a split log drag. I have been dragging twelve years, and I would rather take care of one-half mile of road for a year with a split log drag than to water three horses for the same length of time. We can drag the roads and make them 100 per cent. better than we thought it was possible ever to have them, for from five to eight dollars per mile a year. Seven years ago the Missouri State Board of Agriculture took me off the farm and asked me to go out and tell the farmers around through Missouri how we had been making roads in our neighborhood. I have been preaching the gospel of the split log drag ever since.

Q.—How are these things brought about; what does the split log drag do?

A.—The first thing the split log drag does is to make the road smooth. When it is hauled over the road at an angle of 45 degrees it will carry part of the dirt to the middle of the road. That makes the road smoother than it was before, and elevates the centre. The split log drag obliterates the wheel track. A good many of you people who drove to town to-day did not drive at all. You just turned out of the gate and the team came on to town in the same track that the other fellow did who went before you. In Missouri we used to drive in the same track until the axle began to touch, and then

we made another pair of ruts. The split log drag fixed the road so that even if you wanted to you could not drive in the same track that the other fellow did. Now, as it is, I do not blame you for driving in the same track because there is no other place where your team can travel so easily, but if you use the split log drag no two men can travel in exactly the same spot and the result is distribution of the traffic. There is some talk about using rollers on the road. We use rollers now, but we do not use them right. If you will figure how much pressure is brought to bear per square inch by a waggon loaded with forty bushels of wheat, you will learn that it is greater than the pressure of the heaviest steam rollers. A good many years ago a man came to my house and wanted to rod my house. I believe in lightning rods, and I had the house rodded. I knew that the fellow was going to make a big profit, so I stipulated that he should put that lightning rod down eight feet in the ground, and I thought I would watch him as he dug the hole; and what do you suppose he did? He said, "Have you a spade?" and I said, "Yes, sir," and he said "Let me have a bucket of water and a tin cup and a spade." He took the spade and removed about half a spade full of soil, and then he took a length of the lightning rod and jabbed it down into the ground. Then he took it up and poured half a tin of water into the hole and jabbed the lightning rod down again, and took it up and poured in some more water and so on. Inside of two minutes he had that rod down eight feet in the ground. That is the way we work the roads, and the only reason we don't go eight feet in to the ground is because our wheels are not sixteen feet high. We go as far as we can. If we use the split log drag we obliterate the rut and make a smooth road.

I did not start out to do this thing all in one day. I am telling you the things that have come to me by trying to keep my own door-step clean. I said to myself in 1896, maybe if I will take a little extra care of my road my neighbors will take a little extra care of theirs. One spring when I had dragged the road several years, we had two weeks of the wettest weather we have ever had. Twenty-four hours after the last rain of that two weeks of wet weather, I made a race track out of that clay road, and that road is the main travelled highway between two towns only seven miles apart. When I told people about it I could see them choke. They would not swallow it at all, so I had to get up a theory to explain the matter. The people that raise hogs will bear me out when I say that there are times when you will find a bucket of water in the hog wallow and the more level parts of the hog lot will be dry. We can go out in the garden and dig a hole just exactly like that hog wallow and carry a tub full of water and pour into it and before we get all the water out of the tub there will be nothing but bubbles in the bottom of the hole in the garden. Yet the water stands in the hog wallow. Why? Because the hogs have rooted and rolled and made the earth water-tight. They have made cement out of it. Puddled earth is the technical name for that stuff and that is what you have in the middle of the road. Make your road oval and water-tight, whether it is a dirt road, a gravel road or an asphalt road.

Q.—How often do you go along the road with split log drag in wet weather?

A.—You should not drag the road while it is raining. You should do it when the soil is moist, but not sticky. The first time you drag the road you will find that one part is too dry and another part too wet and only a portion of it just right, but after you have dragged it two or three times it will all dry off at about the same time. Drag the road when the soil is "moist, but not sticky."

Q.—How does the drag work where there are stones?

A.—It will drag the dirt up to the level of the stones so that you cannot tell where they are.

Q.—How do you handle a road that has grown up on either side with sod; if you had a flat road that had never been graded what would you do with it first?

A.—If you had sod or thick weeds take a sharp disk and set it to cut, then cut the sod when it is sopping wet and leave it until it dries. The disk will cut it into slender ribbons which when dry you can move with the drag.

Now this is the whole thing. Make the drag; then hitch to the drag so that it will follow the horses at an angle of 45 degrees; drive the team down the right hand wheel track, and go back over the other wheel track. If you want to quit that is all I ask you to do the first time. You will have made the road 100 per cent better. The next time it rains when the road gets in the right condition, being moist but not sticky, perform the same operation, and again and again after succeeding wet spells until you have dragged the road from four to six times. After the fourth or fifth dragging you will discover that the middle of that part of the road which you travel on is higher than any other part, and therefore you have drainage to that extent. However, it will not be wide enough to suit you, so after the next rain or wet spell, plow a shallow furrow at each side of the road Plow at the edge of the dragged portion, then with your drag spread the furrow to the centre and the road will be two feet wider. If you plow again after the next rain the road will be four feet wider, and then after the next rain six feet wider. This is a perfect receipt for making a good earth road.

Q.—What length is the drag?

A.—That depends on the size of the team. If they weigh 1200 lbs. to the horse I would not make the drag over seven feet long.

Q.—How stout a log do you use?

A.—Use a light log. The best drags I ever built have been made out of red cedar posts or poles. They are made light enough so that I can pick them up. Split the log and set it on edge and put the round part to the back, and put the slabs about thirty inches apart; don't make the drag narrow.

Q.—I have charge of a gravel road two and a half miles long, and there has been $600 spent on it lately. In the spring we took a grader and cut off the hips and put them in the centre. It is pretty hard work for four horses to do it.

A.—Every time you hitch four horses to one of these graders, you are wasting a man and a team, because one of the teams is hauling that big grader. It takes two horses to haul the iron and there are only two horses hauling dirt.

Q.—Our gravel gets so hard that I thought a split log drag would not touch it.

A.—Work the gravel road when it is wet enough to be soft. After it gets smooth you may have to put iron along both sides of your drag.

Q.—What is the diameter of the log?

A.—From ten to twelve inches; don't make a heavy drag. Use a light plank rather than make a heavy drag.

Q.—How about sandy roads?

A.—Up to about two years ago I answered that question according to the books. The books said you could not do anything with sand, but my experience is that the split log drag helps these roads immensely.

Q.—Is sod any benefit to put on a sand road?

A.—If it has clay in it, it will be a benefit, but all the humus you carry into the road with the sod is bad material.

Q.—How about frost coming out in the spring?

A.—If the road is dragged carefully one does not know when the frost comes out.

Q.—Will the split log drag do away with the necessity of covering the road with gravel?

A.—No, but the split log drag will add from five to ten years to the life of the gravel on the road.

I have made arrangements with your authorities to send a copy of the bulletin I have writen on the split log drag, to any person who leaves his name and address.

OBSERVATIONS ON WORK OF THE SPLIT LOG DRAG.

By A. W. Campbell, Deputy Minister of Public Works, Toronto.

I was very glad indeed to attend this meeting, and very glad to be given an opportunity of listening to that excellent address which we have just heard delivered by Mr. King, of split log drag fame. Most of us in the Province of Ontario are interested in the point he has made, and it was unquestionably gratifying to me to observe the very close attention which you were giving to his remarks, illustrating as it does the very great interest which you are taking in road-making and road maintenance in the Province of Ontario. It matters not whether the expert comes from Missouri, Michigan, or Ontario, there are certain principles in connection with road-making and road maintenance which are world-wide. They are universal; must be adhered to if we are going to make good roads, and make them in the cheapest possible way. I was exceedingly pleased to hear the enthusiastic manner in which Mr. King tried to impress upon you the principal question of utilizing the split log drag. It is only by an enthusiastic description of wonders which it will perform that will cause you to study it out, and, as he says, to give it a trial. If you can make a split log drag in your district it will not cause you more than a few hours time and a piece of timber; and, as Mr. King said, eleven cents did it. Surely there is no one who has the improvement of the roads in their neighborhood in hand who will hesitate to go to that expense and spend the little time which may be necessary to operate it in order to demonstrate for themselves just what can be accomplished by the use of a split log drag. The split log drag will not make an asphalt pavement; it will not make ideal stone roads; it will not make gravel roads of the most satisfactory character; but a split log drag has a duty to perform which cannot be disregarded if we are going to equip ourselves with an economical and complete outfit of road-making machinery which will make roads in the best possible manner, maintaining them as they are to be maintained, and utilize our labor and the expenditure of our money to the best possible advantage.

There is possibly no state or community on the continent of America that has had more experience in road making than has the Province of Ontario. We have contributed an immense amount of labor, and we have raised and expended an enormous amount of money in trying to make good roads, which

we know to be of such wonderful importance to the welfare of the people of the Province of Ontario. In this we have experimented, and in this we have spent time and money in many instances in a reckless, shiftless, and inconsistent manner, and we have produced results, which, in many instances, were a discredit to ourselves, and which were not what we had hoped for or expected from the expenditure which we were making, and much of this disappointment has been brought about by imperfect equipment of machinery; the imperfect outfit which we had at our disposal to do the work. A man cannot undertake to do a good piece of carpenter work unless he has the proper tools with which to do the work, and it matters not how anxious he may be to do a good piece of work, or how anxious he may be to expend the money profitably for the person he is working for, if he has not in the first place equipped himself with the proper tools he cannot be expected, nor can he expect himself to reach creditable results through that expenditure of his efforts and money. I often wonder if the people realize what we mean in this country by good roads, or better roads, or perfect roads. Do we mean that we must go to additional expense in order to produce these roads. If we do, then it is a question for us to stop and consider as to how we are going to raise the money or to finance the problem before we alter any of our present plans, or undertake to accomplish anything different to what we are doing now. I say that it is not necessary for us to raise any more money or necessary for us to devote any more time to the question of road making in order to make ideal roads throughout the province.

We have expended ten million days of labor on these roads, and, in addition to this through our municipal machinery, the Township Councils of Ontario have taxed the people and expended on roads nearly ten million dollars of cash. If I had the expending of that money since I took office ten years ago, namely, twenty-one million, I would contract and give good ample security, to macadamize every rod of road in this province, just with the expenditure that has been made in the last ten years. That shows that we are taxing ourselves most liberally, most generously, and facts and figures are there to be shown by your own officials to represent the expenditure which you are making. Now, we have not macadamized these roads in that time, true we have made some improvement. In 153 townships in Ontario we have done away with the Statute Labor System, which system had performed a marvelous work in Ontario in its time, but which was incompetent or incapable of making that finish which was required upon these roads. We have raised nearly eleven million dollars of cash and spent on roads, and Municipal Councils have contributed very largely in the way of grants to bridges. Yet we do not appear to have produced the improvement upon our roads which should have been expected from that outlay.

I am very glad to know that this body of keen, shrewd farmers have come to the conclusion that the day is passed when all that is necessary on a farm is to turn over the soil, sow the seed and reap the grain. It has been clearly demonstrated that in order to produce the best results on a farm the greatest amount of ability must be applied: every operation of science must be carefully studied in order that you may produce the greatest amount from the efforts which you are putting forth. You must provide a foundation for a road to carry the load and you must drain the foundation of the road to carry the load. It is dry earth, it is the soil after all that carries the load. It is not the gravel, the crushed stone, the asphalt or the vitrified brick. You must crown the road for that purpose; to shed the water from the centre into the side. Where the loads are heavy the clay or sand will not withstand the pressure and we must apply gravel or stone.

To prepare the foundation is the first thing. If you were to raise that crown sufficiently high to lower the water line and keep the surface dry and hard and smooth as to neutralize the effect of the frost upon the water, then you have accomplished all that can be hoped for by drainage, but in order to do this on some flat lands the crown would be too high to be serviceable and the tilting of the loads would be dangerous. In that case we believe in reducing the water line by making deep gutters or ditches along the side of the road. Then, with a uniform crown of about one inch of a drop to the foot, that is sufficient to let that water off and if the outlet from the adjoining property is made free the water is discharged, and the road is all right for traffic.

On springy hills our experience is it matters not how much gravel or broken stone you pile on the face of that hill in its undrained condition the frost will raise that up every spring, raise it, imperceptibly, it may be, and that foundation becomes saturated with water and the whole crust of gravel and sand is broken up and in the spring when the frost comes out the foundation is left honey-combed and the whole thing moves like a piece of rubber in front of the wheel. Now, we must either by draining sufficiently reduce that water line or by a system of tile draining, carry away that water. I have always succeeded in getting results more permanent and substantial by placing a row of common farm tiles, one on each side of the road, from the upper part of the spring part to the proper outlet below and in doing this it is useless to lay the tile in the bottom of the drain and put clay immediately back on top, because in doing this we puddle that clay and the drain will be of little service. The tile should be laid in the bottom and covered over with broken stone or sand or any material that is porous and that will stand there as a filter and it will secure the hill for all the time to come as a good and efficient road. I believe Municipal Councils should, as far as possible, decide on the width of the road. Our leading roads should be made about 24 feet in width between the ditches, and the crown of the road should be made with a drop of about one inch to the foot from the centre to the side. A road 24 feet wide would be 12 inches higher in the centre than at the edge of the ditch. I would say for an earth road, crown them with a split log drag or with a grading machine. After they have been once crowned and shaped with whatever instrument you see fit to use, the important part of your whole organization is to enter upon a system for the maintenance and keeping in shape and repair of these earth roads. I would prefer using a heavy grader in the first formation of the roads. In most soils the split log drag will accomplish that same thing. Mr. King tells me it will; we have not used it to any extent in this Province yet. We are using them for maintenance not for construction.

The grading machine is an exceedingly serviceable instrument in the hands of trained and experience men. Many miles of road are being made as perfect as roads can be formed, and many miles of otherwise good roads have been destroyed by the misuse of this grading machine. Let us study how to use a grading machine before we attempt to use it. Many roads would be better to-day if they never had a grading machine near them. But that machine is one of the most serviceable instruments a Municipality can possibly have if properly worked, and I am a staunch supporter and advocate of the proper use of the grading machine. In some townships its operation is a howling farce, and it is not until we get some of you brighter men, who are willing to study this question in a scientific way and take hold of the operating of the machine, that we will be able to determine which of these instruments is the most serviceable, and how they should be employed.

Wherever we have earth roads we should use the split log drag and use it as often as required. Do not decide to use it six times a year, or three times, or twelve times; but decide that it is necessary to use that drag in the spring of the year after the frost has gone out of the ground sufficiently to permit of its being used. Use it a few weeks after in order to harden off the surface of the road, and let it stand until after the next rain. The split log drag should be used after each rain, and if a rain comes each month in the summer the split log drag should be used. Through the enterprize of *The Farmers' Advocate*, which, as long as I have known it, has been an advocate of good roads and has given a wonderful lot of intelligence to the question of road improvement and road maintenance, this year the split log drag received considerable notoriety in Ontario. *The Farmer's Advocate* offered prizes to those who would construct and build and maintain the best piece of road in the Province during the season. By the permission of the Hon. Dr. Reaume, Minister of Public Works, we undertook the judging of the work. We viewed the work before the drag was used, and viewed it after the drag was applied, and as often as possible during the interval.

To my surprise some 62 persons, scattered all over the Province, made application, and the 62 competitors are only a small fraction of those who have, during the past summer, built split log drags and have been using them on the roads of Ontario. But the 62 competitors displayed a marvelous amount of interest in their work, and it was inspiring to see how they abandoned all other public questions and centered their interests in building a log drag, to see what could be accomplished by such a simple piece of machinery, as its very simplicity seemed to cast a suspicion upon its usefulness. In most cases the drag was used on light roads, and the road was shaped first by the use of a grader. In many cases, however, the split log drag was made to do the grading. These 62 men were nearly all convinced that the split log drag was a useful device, and one of the most serviceable implements that could be in the employ of the Municipility. There is no other implement so useful in bringing fresh gravel into the centre. As to its success on old gravel roads, I believe that where an old gravel road has been travelled for years and the slopes have been created, it is better to put the steel blade of the grading machine over it first and use the split log drag after for keeping the road in condition.

I should like to see in every part of the Province of Ontario some man who has sufficient interest in the development of the roads in his section who would go to the expense of a split log drag. I believe that you are going to make permanent roads by its use, and not measuring its usefulness beyond what it is designed and intended to accomplish. If you do, a transformation will be created in the condition of your roads, and much benefit will result to you, and one more step towards the marvelous improvement which the people of Ontario are making will be made and we will have good roads closely in view.

THE OPERATION AND RESULTS OF PRACTICAL WORK IN TESTING COWS.

By Members of the Cow Testing Association.

E. Hawthorne, Warsaw: It is with a great deal of trepidation I appear before you this afternoon. This is the first time I have attended a Winter Fair, and I am something like the Queen of Sheba, who said, after returning from her visit to Solomon, that the half had never been told.

I am thoroughly convinced that the testing of milk by the Babcock test, is the only fair way to pay for it at the creamery or cheese factory. In the County of Peterborough we have five cow testing associations. These associations were formed last spring under the auspices of the Dominion Government. There must be twenty herds, and samples of the milk are taken. Three times a month the milk is weighed, and at the end of the month the box containing the bottles is taken to some central place, and the Government sends a man there to test it, and he gives the results, the amount of milk for each individual cow and the number of pounds of fat, and I have found that there is a difference in each cow. In our herd there is a difference of 100 lbs. of butter-fat between two cows of the same age, and on the same feed, and of the same general appearance, which means a difference of from $25 to $26 in these cows. I think it is important that our farmers should know what their cows are doing. We also get a report from the Government that gives us the herd average of all the cows in the Association, and also the herd average of the fat and the highest individual milk yields in each herd and the lowest individual milk yields in each herd, and the average of the whole Association.

We all know the advantage the travelling dairy was to the country; the only trouble was that it was too long coming. I believe the Government is doing a good thing in forming these cows testing associations. There are some in our district who do not think very much of these associations, because they find out too much about their cows. There are plenty of herds of cattle that do not produce an average of 3,000 pounds of milk, and it is time they were shown up in their true light. The boys and girls who milk the cows are as much interested in this as the people who own the cows. There is a little rivalry about it, and that keeps up the interest. I am satisfied with the results during the past season, and I intend to continue it, and I think everybody should take advantage of the offer made by the Government.

A. Dunn, Ingersoll: When I was asked to come here I thought it was only to assist Mr. Whitley in the discussion, but have found that I am expected to make an address. I am not in the habit of appearing on a public platform, especially to appear before a lot of men who, perhaps, know more about the question of testing cows than I do myself.

Having taken part in the North Oxford Cow Testing Association for two years, I have got to understand pretty thoroughly how difficult it is to get people to take up the work, and if I can persuade any of you to become interested in this important subject, I will be very pleased indeed.

I will first touch on the question of time involved in doing the work. Judging from the tone of the correspondence in the agricultural press, a person is almost led to believe that the whole difficulty of inducing farmers to begin the work, lies there; and, as a matter of fact, in advocating with farmers to get them interested in our association, we find, very often they give as a reason for not joining that it would take too much time to do the work for all the benefit they would derive from it, demonstrating clearly to my mind that they do not realize the small amount of time required to weigh and take testing samples of each cow's milk, and also that they do not clearly understand the object for which they are doing it. It should not take you much more than one half minute to weigh and sample each cow's milk each time. In fact it can be done in less time. The gentleman who did our testing went to two different farms, and without their knowledge, timed them for each cow for their whole herds, of about twenty cows each, and found that in one case it took an average of twenty seconds for

each cow, and in the other twenty-one seconds. Another gentleman tells me they can take the samples of three cows per minute. While it is possible to do the work in that short time, I think it better to allow more when advising you to undertake the work. Supposing you took one minute, it would then only require one hour to take all the samples from each cow, for a milking period of ten months.

Another point I will touch upon is the amount of milk our cows give. We of course, find almost all deeply interested in what their herd, as a whole, is doing, especially about the time they expect the milk cheques to be issued, but in too many cases they do not seem to take the interest they should in each individual member of the herd. Perhaps I could make this plainer by an illustration: If one of you had $1,000 to let out at interest, on one note, you would expect, we will say, interest at the rate of 6% per annum. Now if you were to let that amount out on twenty notes of $50 each, would you be satisfied if the interest on all the notes averaged you 6% per annum, when you knew that some of the notes were only drawing interest at 1 or 2 per cent. while others were drawing you 9 or 10%, or would you not insist on knowing that you were receiving at least a fair rate of interest on each note? Well, if instead of investing that money in twenty notes, you invested it in twenty cows at $50 each, why should you not for the same reason insist on knowing that each cow was returning you, at least, a fair interest on your investment in her.

We find a large number of men who think they can tell which is their best and poorest cows by guessing at the amount given, but I want to tell you, and with the authority of every member of our association, that it is impossible for you to do so. You not only have to weigh their milk to know what they are doing daily, but to have any definite idea of the amount given during the season it is necessary to total up the whole milk for that period. I will give you two or three examples from my own herd. The first is in the case of two heifers which appeared to give about equal amounts per day. It will also illustrate to you the importance of having persistent milkers. While one gave 31½ lbs. on her best day's milk the other gave 38 lbs. and while the former gave 5,642 lbs, in eleven months the latter gave 11,155 lbs. in twelve months. That is just about double, and should show you the importance of weighing your milk. To give you another instance from my own herd: About a year ago a gentleman came into my stable and wanted me to price a good four year old cow. I priced it at $60. He bought her, and after she was sold, when I got the total returns, I found she had given over 7,800 lbs., which netted me over $80. You can readily see that by my not going to the trouble of knowing what I was selling, I was fooled out of $15 or $20, a lesson I will not forget for a while.

I had placed the minimum standard for mature cows in my own herd at 6,000 lbs. I had one cow that I thought would have to go, but when I totalled her milk at the end of her milking period, I found she had given over 7,000 lbs. Now if I had not been weighing that cow's milk I would have sacrificed her for about $20, because in our section the ruling price for culled cows is $20. We do not consider we can afford to keep poor cows. They are shipped out to people who are better off. They go out of there by the car load.

One gentleman in our district took his milk seven miles to our cow testing association every month to have it tested, then came after his box again which made two trips. He had already worked his herd up, by weighing his milk from each cow daily, from the standard of a common herd, until

at the present time they are averaging him over 8,000 lbs. each. This shows you the importance some men attach to the question of testing their milk.

I would like to ask Prof. Dean if weighing the milk every tenth day will not give practical results.

Prof. DEAN: That is practically correct. I believe in Denmark the cows average something over 9,000 lbs. each. If you compare the average of 3,000 lbs. of each of our Canadian cows with that of Denmark you should readily see the great importance attached to this question of cow testing.

W. H. MCNISH, Lyn: I am a dairyman, and I take a great interest in dairying, and I think the dairyman is the most important man on the Ontario farms, because in the first place we have to feed the people. We have to supply them with dairy products, we have to supply them with milk and butter and cheese, and in order to raise up the right kind of young men, it is necessary that we should produce clean, wholesome milk.

I am very glad that the Government to which Mr. Monteith belongs is taking a very great interest in making us farmers produce a more wholesome, cleaner, and purer milk than we have been. There are 28 patrons sending milk to the factory where I send my milk. The Inspector visited the factory in July; he does not test for butter-fat, but for flavor, and I had the curiosity to see what they were doing, and to my horror, I found that there were only eight samples out of twenty-eight of that milk fit to make cheese out of; yet it is all pooled to make cheese for sale, and the man that is really bringing a first-class article both in quality and flavor, is not getting his proper pay. If the regulation that is now contemplated is put in force, I think the people who are progressive will in a short time, get paid for extra labor.

Keeping cow records is practically a system of book-keeping. It is just as important for the dairyman to know his individual cows as it is for the storekeeper to know his individual customers. It would be just as sane for a man to run a business without a book-keeper as it would be to run a dairy herd without keeping records. By keeping records you can not only see what your own herds are doing, but what your neighbor's are doing. We lack enthusiasm, and therefore we do not do nearly as well as we know how to do. The men who are testing cows and keeping individual records are the men who are sending the most milk to the cheese factories, and the men who have the best looking cows in the best condition.

This has been a lean year for the Dominion of Canada. It will be impossible for us, as dairymen, to pay the high prices that are current to-day for feed stuff for animals that are not paying a profit.

In the east fully 33⅓ per cent. of the dairy cows have been sacrificed for little more than their hides are worth, but if the 66⅔ per cent. of the cows remaining are properly cared for, I believe they will give more milk next summer than the whole 100 per cent. did last summer. I do not believe we have sustained as great loss as some people imagine, and I believe the dairymen will look back to the year 1907 as one of the best seasons they ever had, for the lesson that it taught. We have very much improved our dairy cows in the Province of Ontario, and the average yield is only 3,000 pounds of milk; and I very strongly recommend every one to weigh the milk of their own cows in order that they may see what they are doing.

The other day I had a young yearling for sale, and I showed what her dam could do, and I was able to get nearly four times what my neighbors were getting for animals of the same kind, and just as quick as the man saw these records, he paid me my price for this heifer.

You can increase very much the value of your herd by keeping records, even if they are only grade cattle.

THE CO-OPERATION BETWEEN MILK PRODUCERS AND OWNERS OF CHEESE FACTORIES AND CREAMERIES.

By Frank Herns, Chief Dairy Instructor for Western Ontario, London.

We might ask what is co-operation? And then what is co-operation in the dairy business? Co-operation is the joining together for mutual benefit, and consists of a union of effort, the fruits of which shall be divided among the participants. Co-operation in dairying, then, should consist of the united efforts of all engaged directly or indirectly in the business to make such a business profitable, and in order to do so each individual must be willing to assume their share of responsibility. It is by co-operation that Denmark has built up great dairy interests.

Co-operation will pay. The "Almighty Dollar" is after all the thing that appeals most forcibly to the average man engaged in the dairy business: we are in the business for the purpose of making money. We must therefore take human nature as we find it, and one of the first things necessary is to prove to, and educate people up to the fact that co-operation in the dairy business will pay.

How much it will pay depends on a number of influences and the faithfulness of those who co-operate. As soon as people begin to see that the more thoroughly each individual is educated in the great principles of united effort the larger will be their profits.

Co-operation is not a sure way to ease and shiftlessness on the part of any producer of milk, neither is it a means of livelihood for any cheese or butter maker who has not the knowledge, or the desire to exert himself as he ought in his particular part of the business.

It is not proof against the errors of ignorance, or mismanagement, or fraud, or other problems due entirely to lack of effort on the part of any individual. In short, co-operative effort is by no means independent of the every-day principles that underlie success in any business undertaking.

The individual in the chain of co-operation must recognize that he has a duty to perform and that application, good judgment, and continued effort is required if each is to reap the full benefit claimed for co-operative dairy work.

The producer cannot get along very well without the consumer, consequently he must expect that the consumer will have something to say as to what quality of goods shall be offered him. Any one producing dairy products or other foods has a right, no doubt, to produce unclean, or unwholesome food on his premises so long as he consumes it himself; but when it is offered for sale it must conform to a reasonable extent to the laws of pure food production.

I wish to speak more particularly of the necessity of co-operation between the patron, the man who produces the milk or cream, and the manufacturer or maker, who converts this raw material into marketable cheese or butter.

The producer is responsible to a great extent for the result of the finished product. Nearly one half of the quality depends on flavor, or taste and smell, and this flavor is largely dependent on the care and handling of the milk or cream before it reaches the factory. The producer does not understand the technical principles underlying the manufacturing of cheese, and therefore does not realize the effects of undesirable flavors in milk which is to be made into dairy products. So many patrons seem to think that when the milk is received at the factory their responsibility ends.

They have never made into cheese tainted, gassy, or overripe milk, and cannot realize the enormous loss arising from this source. Their milk does not come into competition in open market (as other products do) until after it is made into cheese or butter, with the result that they expect any defects in the cheese or butter, and consequently lower price, shall be made good to them by the maker, when in reality some individual patron or all of them may be responsible for such defects by not making the effort required to take proper care of the milk.

The co-operative cheese or butter factory should show its greatest benefits in the uniformity of the product. The butter or cheese made by a hundred different milk producers would be of a hundred different kinds, put up in as many styles and worth as many different prices. It would have a hundred different flavors, textures, and colors. But if we take these hundred different lots of cream or milk, mix them, and allow them to be made up by one experienced maker, then the hundred different flavors, textures, and colors are blended in one, one style of package is used. The price immediately goes up because the product is uniform and the one quality can be obtained in large quantities.

But we must not forget that in mixing these different lots of milk or cream that the uniformity will be present, but the real quality of the cheese or butter must depend on the individual condition of the different lots of milk or cream.

One overripe or tainted lot will, when mixed with the others, bring the standard of the whole production down to a level with this poor lot; and until this is fully realized by the producer, and such measures taken by them that there will not be any tainted, gassy, or overripe milk produced for manufacture, just so long will we have some dairy products made that, although uniform in certain ways, still not finest from the consumer's standpoint.

Again, no man has a right to be connected in this chain of co-operation as a cheese or butter maker unless he thoroughly understands his business and is willing to make an honest effort to fulfil his part of the contract, in making the most and best possible out of the raw material placed in his hands. If he is not clean and tidy and his factory kept in a proper condition he has no right to expect the benefits arising from co-operative dairying.

Again, the factory should be well patronized by the patrons, for the greater the product the less expense for operating, and the greater the net returns to the farmers.

The more concentrated the milk or cream routes the less the cost of gathering cream or milk.

To my mind one of the greatest mistakes of our dairy system to-day is the small factory. Small factories must necessarily mean cheapness all along the line—cheap maker, cheap building, cheap equipment. This must have a certain influence on the producers, and lead to a lack of stability and effort on the part of those who produce the milk, and of the man who makes it up. We almost invariably find that in the larger factories the cheese are of a better and more uniform quality, that the business is on a sound basis and such improvements as may be required are readily secured.

The patrons may argue that the greater the competition among the factories the larger the returns. This, I do not think, will bear out in the majority of cases. The expense of keeping up factories should, if properly done, be as great for the small factory as the large one and the cost of making, if properly done, must be greater, while the product is very often of such an inferior quality that much less price must either be taken, or else the price

of all the cheese made everywhere must be lowered, in order to make up for losses sustained by the buyer, on inferior cheese.

Patrons will say that the expense of drawing milk long distances, is too great. This I know is one of the problems of the business at the present time; but if a better quality of cows were kept and more attention paid to feeding and producing it would not be necessary to cover a very large territory in order to get a good load of milk, and even if patrons wished to draw the milk themselves a larger factory could be maintained where a small one is now operating. We must remember that in manufacturing cheese it is only after a certain amount has been made that any profit can be assured to either the cheese makers or, if a joint stock company, to the share-holders, and that the patrons themselves cannot get as good returns as they would if factories were run on a larger scale.

Many, of course, will say that the cheese from the small factory sells for as much as from a large factory. This may be true to a certain extent, but I believe that a lot of poor cheese is made in some of the small factories; and this being true it stands to reason that the price of large lots of fine cheese is affected by throwing quantities of inferior cheese on the market. The report of the Official Referee at Montreal this year bears out this statement to some extent: He says that 23 per cent. of the cheese seen by him under "finest" contained lots less than 30 boxes, 43 per cent. lots less than 40 boxes, 83 per cent. lots less than 70 boxes, 93 per cent. lots less than 100 boxes; and only 6.5 per cent. lots of cheese seen by him were lots of over 100 boxes that were classed as under "finest." Now, these lots of cheese must represent shipments of not less than a week's cheese, and it seems to me that somebody must have had to lose the cuts for these cheese. If the maker lost it he can't stay in the business. If the patrons lost it, does it pay to have small factories? No doubt numbers of other lots of cheese were passed by the buyers that although not perfect, still were accepted. It certainly looks that so far as the small factory is concerned it will pay milk producers to co-operate in cutting out some of the small factories for the improvement of the trade.

Any patron of a cheese factory who persists in storing or drawing milk in a rusty can or using any dairy utensils that are rusty or in such a condition that they are impossible to keep clean is not co-operating in any true sense with his neighboring patrons or with the cheese maker. Rusty cans are a source of all kinds of trouble in the dairy business.

The cracks and crevices are impossible to reach with any ordinary methods of cleaning, with the result that they are a prolific source of bacterial contamination of the milk. For the small cost of new cans it will not pay for a few patrons to injure the product of the others in this matter of rusty cans. But it will pay to have entire co-operation on the part of the patrons along this line and when requested by either the cheese maker or the Instructor to get new cans, to do so, for they are undoubtedly in the best position to know when the cans are unfit for use.

It is or should be well known that all milk to be made into dairy products should be produced in the most cleanly way, strained (cooled at once after milking), into clean cans, this to be done for the benefit of all concerned, that the finest dairy products may be made and consequently the highest price obtained.

If there are any patrons who fail to make this necessary effort, they are not co-operating with their brother patrons who do these things, and therefore they have no right to expect an equal share of the profits. It is not fair or just that any patron of a factory should make no effort to produce the very best milk or cream, expecting his neighbors will carry him along

with their milk which has been properly handled. Such being the case do we find every patron of a factory so conducting his business that he is contributing his share towards the common welfare of the enterprise? If 75 patrons out of 100 produce sweet, clean milk, and the other 25 do not, these 25 are certainly not doing their duty towards the other 75, and are not co-operating in any true sense.

Thousands of dollars are lost every year by the milk producers of this country by not having plenty of cold water, or ice for cooling purposes on the farm. To store ice does not cost very much, and the cost is saved many times over. It is somewhat discouraging for some patrons to store ice and send the milk sweet and cool, while perhaps his neighbor does not feel inclined to do anything of the kind.

Here is where co-operation will come in again. Let everyone store ice that possibly can. Use it for putting around the milk cans in hot weather, and I venture to say that the yield of cheese will increase at least 5 per cent. from the milk produced, and the price increase also from the superior quality that can be made from such milk. The individual returns in cash amounting to a great deal more than the individual cost of storing ice. Milk can be cooled so much more quickly with less worry and labor. The ice also comes in for other domestic uses on the farm. It will pay to store ice. If anyone will prove to the entire satisfaction of all concerned that returning ordinary whey in the cans has no harmful effect on the milk supply, then I have nothing to say about whey tanks. But as yet I do not think anyone will make that statement. I believe the patrons have a right to have clean whey returned in the cans just as well as they have a right to send clean milk. The proper thing to do no doubt is not to return any whey in cans, but the practice seems to have got a secure hold in the business, and it may not be practical in many cases to feed the whey at the factory or sell it. Assuming, then, that whey is bound to be returned, and also assuming that if such is the case it would not be practical or profitable to return whey in other cans than those in which the milk is drawn, it then becomes a necessity that this whey be clean. The tanks must be constructed in such a way and of such material that they can readily be kept clean. I believe the whey tanks of Western Ontario at least, have been kept cleaner this year than ever before, but they are yet on the whole a long way from perfection.

Patrons who do not wash their cans properly are not co-operating with those who do. I believe every effort should be put forth to educate patrons up to the necessity of properly washing cans, but I must say that some of the whey which is sent home makes it almost impossible to properly sterilize the cans with the facilities at hand at the average farm house. We hear of large numbers of our cheese developing with age a whey flavor, and a fruity flavor. Now there is to my mind only two ways by which cheese will develop whey flavor. One is through uncleanness at the factory, and wrong methods of making; the other is through the medium of the whey tanks. The first trouble is pretty well cleaned up now, consequently I think we are safe in saying that the majority of whey flavored cheese are due to unclean whey sent home in the cans not properly sterilized.

Again, there are certain gassy, yeasty, and other flavors that seem to develop readily in old, sour, unclean whey, and there is no doubt that the plant life or bacteria that are the direct cause of these flavors are carried in the patron's cans and finally become seeded in a great many different places. Certain flavors due to bacteria may become present in one or more patron's milk, these are brought to the factory, many times undetected as

they are not far enough advanced, they are not killed in the process of making, they pass into the whey tank and are widely distributed through the milk cans among the other patrons. Thus the entire number of cans may become contaminated through the medium of the whey. If not sterilized their growth readily increases and becomes present in almost all the cans.

To minimize the contamination of the cans by returning whey, it becomes necessary to free the whey from these undesirable germs. We may clean a whey tank every day but unless the tank is thoroughly sterilized with live steam it is not clean from a bacteriological standpoint. In the case of wooden tanks, the wood being somewhat porous will contain a certain amount of germ life impossible to dislodge with ordinary washing.

If the whey is heated (by the introduction of steam in the tanks) to a temperature of 160 or a 165 degrees, and held at that temperature from one to two hours, it should put the whey in a much cleaner condition to go into the patrons' cans.

Ordinary whey will have acidity of about 1 per cent. or over, depending on cleanliness of tanks when returned to patrons. Whey heated to 130 degrees, acidity 5 per cent.; whey heated to 140 degrees, acidity 45 per cent.; whey heated to 150 degrees, acidity 4 per cent.; whey heated to 165 degrees, acidity 25 per cent., or practically sweet.

Turn exhaust steam into tank and add sufficient live steam to raise temperature to 165 degrees, will go into patron's can at about temperature of 140 degrees in hot weather if tanks are covered. Steam should be distributed around tank at bottom.

The advantages are:

Keeps the whey sweet.
Gives better feeding value.
Can be fed to young calves and pigs.
Keeps the fat in the whey.
Prevents fat from rising in the tanks.
Keeps the tank cleaner.
Keeps the cans cleaner and makes them easier to wash.
Practically kills bitter, or yeasty flavor, and gas flavors.
Will inhibit the growth of all germ life.
Does not have that old sour disagreeable flavor that ordinary whey has.
The cans will last longer.

Cost about 50 or 60 cents per ton of cheese. For factory of 150 tons cost be about $75.00 or $80.00.

With 80 patrons would be about $1.00 each. A very small cost compared to the benefits secured.

It will pay to heat the whey from the standpoint of cans alone, as the sweet whey does not take off tin like sour whey. It also kills disease germs, particularly tuberculosis.

The patrons get nearly all the benefits from having clean, heated whey, consequently if they will pay their share of $1.00 or so, towards the pasteurization of the whey, I am sure the makers would be willing to take the little time and trouble necessary to make it a success. It will be of no value if only half done. The temperature should not go above 165 degrees or the albumen will separate and the whey will be slimy. It will pay to heat the whey from the standpoint of saving in cans alone, to say nothing of lessening the chances of having over-ripe and tainted milk which may be due to the effects of unclean whey.

Then, again, I think it is generally conceded that cheese cured in up-to-date cool-curing rooms at temperatures between 56 to 60 degrees are a great deal finer in texture, flavor and keeping qualities than cheese cured in the ordinary room in hot weather. That if all cheese where cured in such cool-curing rooms, thousands of dollars would be saved the patrons in shrinkage in weight alone, to say nothing about the improvement in quality and greater price, and that even now the percentage that are cured in cool-curing rooms are having a marked effect on the consumption of cheese on the market. There are sections where a number of cool-curing rooms have been established that are being paid 1-8c. per lb. more for their cheese than some other sections where cheese are cured in the ordinary hot room. Then if cool-curing rooms are to be put in it seems to me that the patrons of factories will have to co-operate with the owners of the factories and with the stockholders of joint stock factories in helping to bear the expense of these improvements.

The patrons are the ones who will reap the greatest benefits, both in the improved quality, demanding a higher price, and the saving in shrinkage, yield, and if they would come together and agree to pay one half the expense of putting in cool rooms, I believe hundreds of them would be put in, in the near future.

This is where a large factory again comes to the front. A factory making 100 tons of cheese usually has about 100 to 125 patrons. A modern cool curing room will cost about $600 to $800. If half of the expense was borne by the patrons it would amount only to from $1 to $4 each, a very small amount when the benefits to be derived are considered.

Even if the patrons bore the whole cost of a modern cool-curing room for curing cheese the cost to each would not be great. It is by the joining together of all concerned that makes the burden light and the final cost of improvements a small item.

It will pay to put in cool-curing rooms.

I believe the cost of producing milk on the average farm has increased during the past few years. There has been increased cost of labor, and increased value of feed, but I do not think the cost of producing milk has risen to as great a proportion as the cost of manufacturing this milk or cream into cheese or butter.

The cheese or butter maker or manufacturer is also up against the problem of increased cost of labor. His supplies have gone up 25 per cent. His price for making has remained the same, while the price of dairy products has gone up to meet somewhat the increased cost of production. It certainly looks as though the manufacturer should have more for making it if he is to continue the improvements required by a more stringent market condition.

By the patrons co-operating with the maker and paying him a few cents more per 100 for making it will put him in a position to improve his business, keep his plant in sanitary condition, and keep in the business the best men who are undoubtedly to some extent going out of the business for reasons already mentioned. This small increase in the price of making will not be felt by the patrons and they will undoubtedly get it back again in improvements made from the makers' end of the business.

There are 280 cheese and butter factories in Western Ontario, and this year they spent $52,834 in improving their buildings and equipment, and taking the past five years, over $250,000 has been spent by factory owners and joint stock companies of Western Ontario in trying to put their factories in a better condition. As much and more has been spent in Eastern Ontario.

Our makers are spending money and time in attending dairy schools and the majority of them are doing everything they can to fit themselves for their business and improving their methods. The Departments of Agriculture of both Governments are spending money in further improved transportation of dairy products, in getting better cold storage facilities, employing expert instructors, and doing everything in their power to advance the dairy industry.

I would like to ask the patrons of our cheese factories and creameries:

Are you living up to your opportunities? Are you doing what you can to improve the quality of the milk or cream?

Or must you confess, some of you at least, that you are getting a little behind, and are not improving your methods as fast as our cheese and butter makers are?

I believe the majority of our factory men are spending all they can afford from year to year in improvements. But let me say that if we had palaces for cheese and butter factories, that after all the quality of the cheese and butter would depend to a great extent on the raw material, the milk or cream, and I believe the weakest link in the dairy chain to-day is the quality of the milk.

I leave this for your serious consideration.

THE SANITARY HANDLING OF MILK AND MILK PRODUCTS.

By H. H Dean, Professor of Dairy Husbandry, O. A. C., Guelph.

Some one has said, "Every good farmer has two farms, the real and the ideal. The ideal is always a little better than the real, because when the real catches up with the past ideal there is created a new and better ideal. As soon as a man has attained in reality the best ideal he can create he comes to a standstill, and when a man gets to that point he begins to go backward. Keep pushing up your ideals and strive for them."

The foregoing is true also of the dairy business. Every good dairyman has two qualities of dairy products, one which he produces and sells—the real, and the one which he hopes to produce—the ideal. The moment a dairyman reaches his ideal, progress ceases. This is the chief cause of trouble at the present time. Too many dairymen have reached their ideal; hence, make no improvement. In fact, the tendency is backward. To produce a higher ideal in the minds of the producers and consumers of dairy products is the object of this address.

Ideals are produced chiefly in two ways—first, by stimulating the person to improve through precept and example, or in other word, by means of education, and secondly, by means of force, or what is commonly known as "the law," which compels a better ideal, though this is often more apparent than real. As an example of the latter method, applied to the improvement of the milk supply of cities, the following extracts from the public press will illustrate. A Canadian city, through its authorized officer sent out this notice recently:

"You are hereby notified that if you wish to continue the sale of milk you must do so in a manner approved by this office."

"You must have your license posted in store and see that your milk is obtained from a licensed vendor. Full information as to source of milk must be given."

"Milk must be kept covered in a cool, clean place, free from anything that might taint or injure the milk in any way, and must be kept at a temperature not exceeding 50 deg., and not allowed to be frozen."

"All receptacles and utensils used in handling milk must be kept scrupulously clean. Clean by rinsing in cold water, then washing with hot washing soda solution, and finally scald with boiling water and turn bottom up to dry in a clean place."

"Care must be taken before measuring out to see that it is thoroughly mixed, as neglect to do this must result in some of the milk being inferior. Milk containing less than 3 per cent. butter fat and 12 per cent. total solids, must not be sold."

"As several samples obtained from stores have been found below this, you are now warned that if any samples obtained from you should be below above standard you will be prosecuted forthwith, and you are liable to be heavily fined."

"No excuse will be accepted. It is your business to see that your milk is right."

An American city which was determined to have an improved milk supply, "prosecuted twenty per cent. of the milkmen before they (the milkmen), understood that it (the city), meant business. As a result of this and of guarding the milk supply from contamination, the infant death rate was reduced forty per cent."

Ideals attained by means of education are possibly more valuable than those attained by means of force, but the latter is a method which makes much better time, and is the only effective way of changing the real into an ideal, in some cases.

It is doubtful if very much improvement has been made during the last twenty years in Canada so far as the production of sanitary milk is concerned. We may safely say that the "please be clean" campaign has been largely a failure, and it would seem as if something sterner is necessary in order to obtain ideal or clean milk or cream for use in the home and for use in the cheese factory and creamery.

The Commissioners of the District of Columbia, U. S. A., have recommended that there be recognized by law three grades of milk for sale, viz., "Certified," "Inspected," and "Pasteurized." (See Circular 114, U.S. Dept. of Agriculture). It is quite probable that the Unied States Congress will pass a federal law in the near future requiring all milk sold for direct consumption to be graded into these three classes. According to the ruling of this Commission, "Certified Milk" is milk produced at dairies which are inspected regularly; have the products frequently analysed; cows free from tuberculosis and all other communicable diseases; cows fed on clean food and kept in clean stables properly ventilated; persons handling the milk must exercise scrupulous cleanliness and be free from infectious germs; milk must be drawn from the cow in a cleanly manner, be immediately strained, cooled and placed in sterilized bottles and be kept at a temperature not exceeding 50 degrees F., until delivered to the consumer. The water used throughout the farm and dairy must be chemically and bacteriologically pure. The milk must not be more than twelve hours old when delivered, and should not contain over 10,000 bacteria c.c.

"Inspected Milk" is a slightly lower grade than "Certified," the chief difference being in the number of baceria per c.c. of milk which is allowed. In this class, 100,000 bacteria per c.c. is the maximum.

The third class known as "Pasteurized Milk" is from dairies not able to comply with the requirements in the other two classes. "Milk for pasteur-

ization shall be kept at all times at a temperature not exceeding 60 degrees F., while in transit from the dairy farm to the pasteurization plant, and milk after pasteurization shall be placed in sterilized containers and delivered to the consumer at a temperature not exceeding 50 degrees F. All milk of unknown origin shall be placed in class 3, and subjected to clarification and pasteurization." "By the term 'pasteurization' as used herein, is meant the heating of milk to a temperature of 150 degrees F., or 65 degrees C. for 20 minutes, or 160 degrees F. or 70 degrees C. for ten minutes as soon as practicable after milking—and after heating immediate cooling to a temperature not exceeding 50 degrees F., or 10 degrees C. No milk shall be regarded as pure and wholesome which, after standing for two hours or less reveals a visible sediment at the bottom of the bottle." In the foregoing we have something clear cut and definite. An ideal is placed before us; in fact, we have three ideals, each one a little lower than the other and no one of them impossible. Shall we lag behind our neighbor in this question of a pure milk supply?

How to Attain the Ideal.

1. At present it seem to be no person's business in particular to see that the people of Canada are furnished with pure milk. At the risk of being called visionary we beg leave to suggest that Parliament appoint a Milk Commission, somewhat similar to the Railway Commission, whose duty it shall be to see that people and factories are furnished with clean, wholesome milk. The Commission should be composed of men of wide expereince in producing and handling milk, and, above all, they need to be men with backbone and good sense. This Commission should be the fountain head of the milk trade in Canada. It is a question more important than railways or anything else, as the very life and health of the people of Canada depend upon a puro milk supply. About the first thing which man requires when he comes into the world is milk; he uses it largely in some form all the way through life; and about all he needs in the way of food just before he passes out of the world, is milk—chiefly cow's milk. The cow may be considered as the "Foster Mother of the Human Race." What should we do without her?

2. A corps of Instructors and Inspectors to carry out the will of the Commission would be needed in every Province. These Inspectors should be properly paid. The U.S. Commission recommend a salary of $1,600 to $2,000 and travelling expenses, which is none too much for the right kind of a man, with the necessary technical knowledge and skill.

3. A central milk laboratory for chemical and bacteriological analysis is necessary, and also branch laboratories for similar work in every dairy district. Standards for chemical and bacteriological tests should be set for the guidance of laboratory workers. Experiments in conjunction with the dairy departments of the various Agricultural Colleges and Experiment Stations should be made. A German professor recommends compelling German Railways to provide refrigerator cars attached to express trains for transporting milk.

The freezing of milk and transporting it in a frozen condition is also recommended. Is this practicable? It can be demonstrated only by experiment.

4. In the distribution of milk and cream in towns and cities, the use of a paper bottle would undoubtedly lessen expense for bottles, labor for washing and lessen the danger from contagious disease, as they are used but once. Quart bottles may be purchased at one-half cent each and should prove a great help in the milk and cream business. Glass bottles, cans, dippers, etc., ought to be sterilized daily.

5. All our exhibitions, including the Winter Fair should give prizes for best milk and cream, best stables and most cleanly kept cows. Every important Fair in Canada ought to have a model stable in actual use on the grounds in order to give practical demonstrations in the sanitary handling of cows, and milk. Milk and cream contests have been tried and proven to be helpful in improving the quality of milk and cream delivered to American cities. (See Circular No. 117, U.S. Dept. of Agriculture.) Prizes for dairy farms kept in a sanitary way would also be helpful.

6. Literature should be freely distributed showing the importance of a pure water supply on the farm, need of healthy cows, and clean, light, well-ventilated stables, need of care in milking, straining and cooling milk to 60 degrees F. for the factory, and 50 degrees F. for city trade. Having done all this, then those who will not improve should be firmly dealt with, and be compelled to produce clean dairy products or go out of the business.

7. The Second International Pure Milk Congress which met at Brussels in September, 1907, recommended universal pasteurization of milk as the best immediate means of improving the milk suppply for home use. There is little doubt that this system is one of the very best for improving the ordinary milk and cream sold for household use. It is a question which every buyer of milk needs to consider carefully. Every town and city should consider whether or not the milk sold should be pasteurized. Where private means are not forthcoming, the municipality should furnish the necessary pasteurizing plant. Pure milk is just as important, or more so, than pure water.

If it is no practicable that all cows shall be free from tuberculosis as shown by the tuberculin test, consumers of milk have a right to protection from possible tubercular contamination, by the State requiring all milk, other than that from tubercular free cows, to be pasteurized. Further, a man who has healthy stock has a right to require that the State shall protect him from possible contamination from neighbor's unhealthy stock by the consuming of infected dairy by-products from creameries and cheeseries. This can be done by requiring that those by-products shall be pasteurized at the factory. (See Bulletin No. 92, Iowa Experiment Station.) Professor Van Behring has discovered a lymph which he calls "Bovovaccine," that is said to make animals immune from tuberculosis.

8. Wherever practicable, proper contracts should be made between the milk producer and purchaser or consumer. The following are among the main points in milk contract agreements of New York and Chicago as furnished by Chas. C. Johnston in the American Review of Reviews for November 1907:

The dairy farmer agrees to:

1. Keep his stable light, clean and well-ventilated. Cows to be kept clean. Hogs, sheep, or fowl are not to be kept in same stable as cows.

2. To thoroughly wash and rinse all utensils immediately after use, to put no milk in unclean vessels and to keep the outside of cans and covers bright and clean.

3. To provide a milk house with clean surroundings, and one which is light, ventilated and not connected with stable or kitchen, painted or whitewashed inside and to be used for no other purpose.

4. To milk with dry hands in a cleanly manner, to remove milk immediately after milking to the milk house, strain through a 100 mesh wire cloth strainer, and cool to 58 degrees within 45 minutes from the time it is drawn from the cow; keep the cans of milk in cold water until the time of delivery, prevent milk from freezing or rising above 58 degrees, transport in a clean

spring wagon covered with clean canvas, not mix morning and evening milk, and not to deliver milk from an unhealthy cow.

5. He agrees further to notify the company at once if anyone connected with the farm has infectious disease.

The milk company reserves the right to cancel the contract, if milk is adulterated or contaminated. The milk companies send inspectors and veterinarians to examine dairies and herds.

In consequence of all this the American dairy farmer finds that sanitary dairying pays. It will also pay the Canadian farmer.

We have omitted saying anything about the importance of sanitary ice cream, butter, cheese, etc. The same principles should be followed in these as in the case of milk. If we can secure sanitary milk all else will follow. The greatest problem is the milk problem.

In the report of the Registrar-General for the Province of Ontario, 1904 (latest available), we are given on p. 9, the number of deaths in the Province at various ages for the years 1897 to 1904. The yearly average deaths for all ages for the eight years is 28,688. Of this number 6,228 or over 21 per cent., died under one year. From one to four years of age the total average deaths were 1,937. In 1904 the total deaths for the Province of all ages was 31,290, of which 6,902, or over 22 per cent. died under the age of one year. Of these 6,902 deaths under one year, 192 deaths were from communicable diseases, and 852 were from diseases of the digestive system, which means in most cases, deaths caused by impure milk.

In cities, out of a total death rate of all ages in 1904, of 8,742, 2,268, or over 25 per cent., died under one year, and of these 364 were from diseases of the digestive tract.

These figures are sufficient to show the very large death rate in this Province among children under one year, and especially in cities where over one-quarter of the deaths are among helpless infants.

The Deputy Registrar-General and Secretary of the Provincial Board of Health, Dr. C. A. Hodgetts, in a recent communication says, "A large amount of work must be done by this Board, as also by all interested in securing a pure milk supply, before very material advantages will accrue to the infantile population of our cities and towns, in the way of providing for them pure, fresh milk."

Our Governments are making strenuous efforts to induce immigration to this country, but are they doing as much as they might to save the native born population, who are much more valuable? We hear of earnest appeals for aid in establishing and maintaining consumptive hospitals, but would it not be wiser and cheaper to prevent the spread of tuberculosis by giving careful heed to the milk and meat supply of our people? In this case, it is doubly true that "an ounce of prevention is worth a pound of cure."

THE HORSE INDUSTRY.

Hon. Nelson Monteith, Minister of Agriculture, occupied the Chair during the session devoted to subjects relating to Horses. In opening the meeting he said:

The question for our consideration this morning is of great interest to the people of Ontario, and I will give you a few figures to show you what the horse interest of Ontario represents. The last figures to hand show that we have 672,781 horses in the Province of Ontario, having a value of $74,000,000. The amount reported as sold is $7,419,000.

You will remember that about a year ago a commission was issued to a number of gentlemen, and these gentlemen visited the various counties of this Province to examine into the conditions of the horse industry of Ontario, and to take such evidence as might be of value, and find out the real situation with regard to the use of sound stallions in the Province. I believe the bulk of you here this morning desire the betterment of the horse industry, and it is our wish to take this matter up in a broad way and see if we cannot still further improve this great interest. I need not mention at this time the percentage of pure-bred animals as compared with grades, but it might be well for me to refresh your memory to some extent as to the number of registered animals standing in the Province of Ontario, serviceable and sound. They have been reported to us as six per cent. of the whole, and twenty-eight per cent of grades. Six per cent. of the registered animals have been reported as unsound, and twelve per cent. of the grades have been reported as unsound. I think it is unnecessary for me to say anything further in that regard, because you know in a general way the result of a great deal of investigation on the part of those gentlemen who examined into the horse industry in this Province. Every county was covered with considerable care, and a fairly close scrutiny made of the actual condition as it existed.

I regret very much to have to intimate to you that Mr. Smith of Columbus, one of our prominent horse men, who is on our programme this morning, has been detained through sickness. Mr. Smith has been a very active horse man and desirous for the promotion and best interests of this industry. Mr. John Gardhouse has agreed to take up the the discussion in the place of Mr. Smith.

SELECTION OF A STALLION AND PROPER TYPE IN MATING.

By John Gardhouse, Highfield.

The selection of a stallion and the proper type in mating are matters that require some little thought and study. It is very important to always select a good sire, and in selecting the sire it is very important to know the mare. You should know just what kind of an animal you have, and just what kind of a horse would be suitable to mate her with. As a farmer, and speaking largely to farmers, I believe that the farm is the proper place to raise horses in this country, because you must have the land for them to run on to develop their muscles. I will therefore confine my remarks more particularly to the heavy class of horses. We get no one horse that is perfect. There are some defects in every animal, and it is necessary that any defects you have in your mare be made up in the selection of the sire. Be sure that the sire is exceptionally strong in any of the weak points the mare may have. It is important to stick to one breed or another; don't cross breeds. When we were out on the commission we ran across animals bred from pretty nearly every breed of horses—probably crosses of Shire, Percheron and Clydesdale; and then we had farmers who thought they could get first-class horses by breeding their heavy mares to light horses, so as to get good steppers on the road. Therefore we would have a mixture of all kinds in one animal, or an animal that was very little good for anything. If you have a Clydesdale mare, breed her to a Clydesdale Stallion, if you have a Cleveland Bay or a Standard Bred, or a Roadster, stick to that type if you want to get the best results. Look over your mare carefully and get the best pos-

sible one you can. There are too many poor ones in the country at the present time. The Hon. Mr. Monteith said in his opening remarks that we had nearly three-quarters of a million horses in the Province at the present timo, and if you could raise the standard of these horses so that they will be worth from five to ten dollars apiece more, it would be worth while. Have you ever stopped for a moment to think that it costs you no more time to look after a good horse than a poor one? It only requires one stall in your stable to keep a good horse. You must have just as good feed, and just as much of it, to feed a poor horse as you do to feed a good one, and in some cases a little more. To get the best results out of stock-raising you first require to have the proper animals, and then give them the best care and attention. Put a poorly bred horse into a good stable, and give him the best care, and you will only have a poor horse.

When I am going to select a sire I first look at the head of the animal. So that he is apt to be a prepotent sire, I like to get one with a good broad forehead, good bright, intelligent eye, and nicely set ear. I believe that a horse is a very intelligent animal, and that he can be taught almost anything. I have sometimes seen men handling horses, and I have thought that the horse knew more than the man that was handling him. Therefore, I say, get a horse with a nice, bright, intelligent eye and a broad forehead, and nicely set ear, and you are apt to have a horse that has some brains, and one that can be taught something. Not only that, but I like a horse that has a nice open jaw, not meaty and thick in flesh; nice clean cut throat to insure good breathing power; a nicely set neck, the rein should carry well back over the withers, with a fairly heavy neck, and it should be well blended into the shoulder. Get all the flesh on the shoulder that you can possibly get. I don't want to see a narrow, thin neck going into a broad set shoulder. You need not be at all afraid in selecting a horse that there is no place for the collar to rest on; it will always find a stopping place somewhere. If the neck is thick and well blended into the shoulder you are likely to have a good covering of muscle over the shoulder, and if the horse gets a little thin in condition he is not so apt to get sore shoulders. Then he should have a deep chest, with the legs well set back under the body. I don't want a horse with the legs set out on each corner; it will make him appear a broad horse and he will be broad between the front legs; but if you have a horse with legs set out on each corner what are you likely to have? A horse with a hollow chest and weak fore flank, two things we want to avoid in breeding animals at all times, because if you have these things you are likely to have a weak constitution, and that is a great detriment to breeding stock of any kind. Then you should have a horse with legs well set back under the body, a fair width apart. Do not misunderstand me. I am not advocating a narrow horse, as we want all the chest width we can get. He should be well muscled down on the inside of the legs and a fair length from the elbows to the knee; a broad, flat knee: as much of the knee to the outside of the leg as you can reasonably get. The bone should be as large as you can get it with the right quality. It is an important thing in draft horses to get the right quality of bone. Get all the bone you can in draft horses, but don't sacrifice quality in order to get the quantity. You will notice the same thing in draft horses that you notice in a man's hands. You will find some men that can do any sort of hard labor and get their hands as rough and dirty as possible, and they can come in and wash them, and they will hardly have a crack or break; whereas the hands of another man doing the same work will become rough, sore and cracked. We have the same thing exactly in horses. If you get this hard, flinty bone, covered with a nice skin, and with a good quality of hair, then you are not likely to have a horse that you will have any trouble

with in the way of scratches or anything of that kind. A horse should have nice springy pasterns of medium length, and he should have a good hard flinty foot made of good material. I don't advocate a great big foot, I think a medium sized foot will wear a little better and is not quite so apt to get down on the heels or get flat-footed. I like a horse with the withers carrying far back. The back should be short and strong and well muscled. Get the ribs springing out as well as you can from the back bone and as long as possible, with a nice arch. It is a difficult matter to get that same spring of rib that we like to find and that depth of rib in the same animal, but aim to get it as far as possible and have as much of both as you can. If you want a man exceptionally strong you should get a man that is built with strong muscles down his back and over his hips; as a rule you will find he is a pretty strong man and you will find the same thing in a horse. I have heard some men say "I want a good dinner basket;" so we do, but that is not all, you can have enough barrel to carry a good feed with a good deep fore-rib so that you have lots of room for lung power and as a rule you will find a strong horse with a good constitution and he will travel well and wear well.

Coming back to the hook bones I remember we used to have them very much more square and flat. I don't advocate that I want a horse with a nice smooth hook-bone that will cover well with muscle and flesh; the same thing that we look for in shorthorn cattle. We want the quarters fairly long, nice pin bones and well covered with flesh, well laid down in the thighs and well muscled down in the inside of the leg, and as broad as you can possibly get them on the outside; strong in the stifle and with a good broad clean hock.

Standing by the side of a horse you want to select an animal with a nicely set leg and with the hock broad, clean and hard. Looking at it from the front of a horse you want a hock that is broad and clean, that is the kind of a hock that will wear and stand all kinds of heavy work no matter whether you have to back with heavy loads or draw forward. The hind leg and shank should practically be the same as I described in the front except that you would require to have three-quarters of an inch more bone in the hind shank than in the front. Another important thing is to know that you have a horse which is a good walker; a horse that will pick up his legs fair and square and set them down fair and square, moving every joint, not a horse that will move his limbs with no knee or hock action. If these defects are in the sire they are very likely to be in the colt. Many of you have noticed horses which when they are walking away from you will throw their feet out sideways, and others when they are being led towards you will step over. This is something we do not want. I prefer a horse that will pick his feet up straight and set them down straight. I would select a horse every time that stepped over if I had to have one or the other, because you will find he will climb a hill better with a heavy load than a horse that keeps his legs too far away from him.

Q.—I live near St. Thomas and there has been a very large importation of Shire horses and I am not able to distinguish difference between a Shire and a Clydesdale.

A.—That is not the first time that question has been brought up in this hall. I might not be able to answer the question but I will say that there is not very much difference in the best kind of either breed. I have heard it said and I believe it is correct that many years ago, probably before my time there was practically one kind of horse in the Old Country, and the difference at the present time is just what little difference they have made in breeding them in Scotland and in England.

THE MOST PROFITABLE HORSE FOR THE FARMER TO BREED.

By H. G. Reed, V. S., Georgetown.

As a rule it is the price which a horse will bring in the market that decides whether he was bred at a profit or not. It is not my wish at this time to favor any one of the numerous breeds of horses. They are all good and while I think that as a rule a farmer might better breed a draught horse yet some men do not like the heavy horse, and to such I would say, breed a light one. If I were asked to name the greatest weakness in the horse breeding industry of our country I would say that it was the breeding of too many general purpose horses. Horse flesh might be divided into two great classes. First we have the special purpose horse represented by the draught horse, carriage horse, road horse and saddle horse; all other horses are general purpose horses (ponies excepted). Now to breed any of the special purpose horses we must breed along special lines but we can get the general purpose horse by breeding in any way we like; in fact he is almost always a cross-bred animal produced by mixing up the different breeds. If I were asked to define a special purpose horse, I would say he was an animal that because of his breeding and conformation was specially adapted to some particular kind of work and was quite out of place at anything else; for instance, a draught horse is an animal well adapted to moving heavy loads, and is not well adapted for anything else. An ideal carriage horse is simply a gentleman's horse and not a really good animal aside from his special line. The same may be said of the road and saddle horse. The general purpose horse is an animal that while he is not specially adapted to any particular work, is not altogether out of place at any work he may be put to. He is not a draught horse and yet he will move a load along fairly well; he will draw your carriage or road waggon or even do fairly well as a saddle horse, in many cases a most useful animal on the farm and yet from the market standpoint not a desirable animal to breed. My advice to the farmers is to specialize more in horse breeding. Select your breed and stick to the one breed right through. You can make your choice between the Shire, Clydesdale, Percheron, Belgian or Suffolk Punch, in the draught breeds. Then we have the Hackney, Coach, the Standard-bred, and the Thoroughbred among the lighter breeds. I know men in this audience who have been breeding horses for 40 years who could not show me to-day a horse bred by them with two crosses of any one breed in them. I suppose you are all aware that four pure-bred crosses will enable a man to register a filly foal.

There is no well recognized or uniform type as applied to the general purpose horse. In the show ring we often find a collection of horses in this class, all the way from a draught horse to a race horse, and yet each exhibitor thinks he has an ideal general purpose animal. In all the special classes the difference in type is well understood. We all know a draught horse when we see him. Possibly there may in some quarters be a little difference of opinion as to the distinguishing points between a road and a carriage horse, and yet no horse man would have any difficulty in distinguishing between the type of an ideal road and a carriage horse. The conformation is different and the breeding is also usually different. Although we have some good carriage horses produced from the Standard-bred, yet, as a rule, in our own country in particular, the best carriage horses are the products of the Hackney or Coach breeds. The road horse is always represented by the Standard-bred. Let me repeat, stop breeding the general purpose horse and start to breed an animal which, while not costing any more to feed and raise, will bring you in many cases twice the market price.

Now about the quality of our brood mares. I think a very large proportion of our brood mares should never be used for breeding purposes. Remember the old adage if you want the best,—"Breed from the best." As farmers we are not doing that, and in some cases we are going to the opposite extreme and breeding from the very worst we have got; in some cases so bad that the animals are utterly useless for anything, but because they happen to be mares, they are used for breeding purposes. I have known mares so vicious that they would kick a man off a load of hay if hitched up, and yet they were considered good enough to breed. Our breeding mares should be reasonably sound, especially should they be free from any hereditary tendency to blemishes and disease. Some of the most ordinary blemishes in horses are hereditary; for instance, spavins and ringbones, blindness and roaring are all transmitted from parent to progeny, from generation to generation. Of course there are exceptional cases when an animal may be afflicted with any of the above troubles as the result of an accident, but the rule holds good all the same and an ideal brood mare should be sound.

Then again a mare might be sound and yet far from being a good brood mare, because of bad conformation, any marked weakness of conformation should disqualify a mare for breeding purposes, because she will surely transmit her own undesirable conformation to her progeny and although poor conformation can be bred out in time, life is far too short for any man to hope to succeed in developing a high class horse from a very poor dam. Consequently I say, weed out the brood mares; use only good individuals for breeding purposes; get them as well bred as you can. All else being equal the better bred your mare is the more profit she is going to give you.

And now as to the stallion, never use any but a pure-bred horse. Many men think that if a stallion is a good individual it makes no great difference what his breeding is. Now I believe if you take two horses both equal in every respect, except that one was a registered horse and the other a grade, that the pure-bred horse will beget a larger proportion of good foals than the grade. There is a great natural law called the law of reversion acting in all our breeding operations and the tendency is for the progeny to revert to original characteristics and the farther away from any undesirable ancestor a stallion is the more ability he will have to transmit his own characteristics to his progeny. Of course I do not think that registration is sufficient in a stallion. Unfortunately many registered horses are poor individuals and I would not use such. Get the good individual, then behind that get the good pedigree and you have done about all you can to insure good results. I believe that if the farmers of Ontario would act on what I have said to-day, that in 10 years the value of the output of horses in the Province would be quadrupled.

Q.—In the Hackney class would you prefer to use a stallion 15.2 or under?

A.—The size of a Hackney is after all a matter of taste. I would prefor a Hackney about 15½ hands to one much higher than that. Some of the highest priced carriage horses have been under rather than over 15½ hands high. In the Hackney quality goes for more than size.

Q.—Is a smaller horse about 15 or 15½ hands high, likely to be better bred than one 16 or 16½ hands high?

A.—I do not think you can determine anything about the breeding of a horse by his size.

Q.—What do you mean by "Quality" in a horse?

A.—Quality in a horse is something very hard to describe yet every horse man knows when he sees it. In part it consists in a cleanness and

fineness and hardness of bone; a nice fine glossy coat; thin skin showing the blood vessels well marked. A clean bony head, bright strong eye and good breedy appearance. It is quite possible for a rather plain horse to have considerable quality.

Q.—How would you tell a road horse from a carriage horse?

A.—In the first place we take the gait of an animal. A road horse may pace and be all right. In the carriage horse we could not tolerate the pacing gait for a moment. Then the carriage horse must go square, while some of our best road horses do not, but go wide behind. The road horse has to go fast; the carriage horse has not. The road horse has to have stamina to go fast or far, but the carriage horse is very seldom driven either fast or far. The main requisites in a carriage horse, are graceful appearance, attractive but not fast action, and a quiet temperament.

Q.—Would you disqualify a draught horse for a bog spavin?

A.—Yes, most certainly. We generally make a little allowance for puffiness in the hocks of a draught horse, but we could not overlook a spavin.

ADDRESS.

By Hon. Adam Beck, London.

I admit at once that I am taken completely off my feet, by the request of the honorable gentleman, asking me to say a few words to you. However, I am delighted to have the opportunity of coming here to-day, and seeing the exhibit of live stock that you have here, and listening to the discussion that has taken place on the horse question, I am only sorry that I was not here at an earlier hour and hope to hear more of your discussion before I leave the city. This is the first opportunity I have had of visiting this Show. The horse interests of the country have been as near and dear to me as any other interests, although at the present time I am greatly interested in the Power Question of the Province of Ontario, but I find that my old love for the horse is still with me, and I am as fond as ever I was of a horse, and I appreciate that it is one of the greatest interests that we have in this country and I hope, at no far distant date, that this great interest will have the fullest consideration at the hands of the Legislature of the Province of Ontario and the Department of Agriculture. It is regrettable to me that the horses, in the Province of Ontario are not as good as we would like them to be. We have reached a period of horse-breeding in this country when it is only profitable to produce and deal in high class animals; it is the same in sheep, swine and cattle, we are beginning to realize that we must only produce the best, because it is only by producing the best that we can expect to realize a profit. The horse interests have been neglected not only by the Government, but also by the farmers. I do not believe the same intelligence and judgment has been exercised in the breeding of horses, that has been used in the breeding of the other animals on the farm. Lack of knowledge, lack of information, and lack of opportunity of acquiring knowledge has probably had much to do with the failure. I say it is a failure. The horse breeding, as a whole in the Province of Ontario, has not been the success it should be. I have gone to an intelligent first-class farmer, a man who is fair, a man who has made a success of breeding everything and knows the value of everything on the farm, and knows how to secure the best results, but when you go to him to buy his colt and ask him what he wants for it, he says, "I do not know what it is worth," and he does not know whether it is a good

specimen of the breed it is supposed to represent, or what he ought to ask, and when we find conditions of that kind existing, we must at once say, he does not know aything about the proposition of breeding horses. I have been asked repeatedly the price for an animal that was twice its actual value; an exorbitant price that was ridiculous, and therefore I say, that not only in the breeding, but in the actual value of the horse that is produced on the farm, the average farmer doesn't know what it is worth in the market, and how can you expect results when the farmer doesn't know his business. That reminds me of an address I heard yesterday, in which the speaker said, that we wanted more education in these matters and we hear everywhere about education. In my opinion, what we need more is practical demonstration and practical knowledge; you may call it education, but, sir, the farmers in the Province of Ontario are hopelessly at sea as to know how to go about getting good results in breeding horses. I often feel sorry to see the waste that is taking place in breeding horses on the farms. Some men want nothing but pedigree, want a pedigree as long as your arm, but do not think of quality and substance; all he can think of is a very fine pedigree. Another wants cheapness. Five dollars saved in the service, is money saved at the moment, but that five dollars costs him fifty dollars before he gets through because of his bad judgment in breeding to an animal that is unsound, and how can you expect results when this is the case. You will never have results. The average farmer has not time to look over a horse and I believe it would be well that we should only have such horses in existence as are fit for service. It would be a hardship at the present time, but we should weed out a lot of horses that are not deserving of patronage. We should have these horses licensed, and we should have capable men to decide for the people the animal that is deserving and fit for use. And that is one thing we might do as a Government. I think the Minister of Agriculture deserves great credit because when he entered into an undertaking that has been at sixes and sevens and in every way pretty hard, in a short time to create order and get good results, but he is the man to work at it, and put it in proper shape. First, he has had a thorough investigation of existing conditions, by thoroughly capable men and we can legislate and deal with the matter on the results of that investigation. He has had a searching enquiry made as to horse-breeding of this country, and we will pass legislation that will not inflict too great loss upon the people who have been breeding promiscuously, and who have been buying and offering them to the farmers, that should not be permitted to enter the country. We cannot be careful enough to create too great a loss, but the sooner we get away from the mongrel, the sooner we will have good results in breeding horses in this country, and when you have done that, the farmers ought to get rid of the scrub mares. The last thing you want to sell on your farm is a good mare. If she is no good, get rid of her, and get a good one, or stop breeding horses. How often do we hear it said, "The success of that man is due to his good mother; he inherited it from his mother; how could he be anything else with such a mother?" The same thing applies to the animal. If you expect good results, you must have good breeding stock. I say that to-day, the good horses command a higher price than they ever did to my knowledge, as a buyer of horses; that is during the last twenty years, notwithstanding the automobiles and other devices to take the place of the horse, the horse will always remain but he must be a good horse. You know, sir, what a great loss came to the farmer of this country when the tram-cars were transferred from horse-power to electric-power. There was no longer any market for the scrub. The South African war came along, and it was a blessing to the farmers of the Province of Ontario who had scrubs to sell, and the scrubs are gone, and if we will

only stop importing them from the United States, they are gone forever. If we bring twenty thousand or more from the United States, in the way of Texas ponies, and other scrub horses, it will prove a great mistake, and it is a great mistake. We can show the Americans how to breed horses, we have convinced the Americans that the Canadian horses are the best on the Continent of America. And I have proved, and George Pepper has proved it, and Crow and Murray have proved it. You proved it in Chicago the other day, that you can produce a better steer, a bettter cow, and a better sheep.

You proved more than that, you proved to the American citizen, that you could produce a Canadian, a young Canadian, who could show them how to analyze and judge a horse and other live stock.

I was going to say that the water-powers were the greates national asset we had in this country, but I must say that the most valuable asset we have in the Province of Ontario are the agricultural lands of the Province of Ontario. I say the agricultural interests of the Province of Ontario are second to none, of any country or State of equal size on the Continent of America, and I say the young Canadians who are raised in this country are one of our greatest assets and the young farmer of this country has demonstrated to the world, in the City of Chicago, that he is par excellence, the greatest agriculturist in the world.

But come back to the horse for a moment, I say we have demonstrated, that we can produce in this country, cattle, sheep and swine that compare with any in the world. I had the pleasure of seeing Canadian horses, a few months ago demonstrate and accomplish something I never would have believed they could do, because I did not know what competition we would be up against. Canadian horses went to the old land, horses bred in the Province of Ontario, some of them in the County of Middlesex, and the County of Elgin and Norfolk, and after a voyage of two weeks, they went in competition with the world, in competition with the country that is acknowledged the world over, as the King of Horse-breeding Countries, England and Ireland, and after two weeks' journey, with only two days' rest, they went into competition, and seven horses secured thirteen ribbons, seven Canadian horses, bred from Canadian mares, by Canadian sires, one of the sires was bred in the Province of Quebec, they won thirteen ribbons. They were in competition with the best harness horses of the United States, France, Belgium, Austria, Germany, England and Ireland. Why did they win? Not because they were Canadian; not because they had advantage in any way. The judges were composed of Frenchmen, English and American. They were most satisfactory judges, men who know their business, and men who don't make mistakes, but men who give their judgment on merits. The great victory was for Canada, and the great advertisement was for Canada, and one thing more than any other that impressed the Canadians who happened to see this victory, was the enthusiasm and ovation that the Canadian Exhibit received when it came into the ring. Before the competition and before they won, they were cheered, because they came from Canada. It at once convinced some of the Ministers of the Crown who happened to be there, that although Canada might be looked upon as a Colony, that Canada, today, holds a place in the hearts of the people of the Old Land, that nobody ever anticipated that she would, why? Because we are becoming a great people. We have demonstrated that we are a great country, and we will demonstrate that we are a great nation before many years. I say, therefore, don't relinquish or relent or become discouraged in the breeding of horses. Apply the same business, and business energy to horse-breeding that you are

applying to cattle breeding and you will have a product that will be as remunerative as any other product that you can raise on the farm.

In addition to the magnificent opportunities and facilities you have in Guelph, and the fact that Guelph to-day is better known on this continent as the centre of Agricultural thought, and in addition to the great college you have created here for the benefit of the farmers, I am glad to see that the present Government is progressive enough to make it still more beneficial to the farmers, and that in addition to the great fair you have here, you are going to give horses some consideration, and that a building may be erected in this city for the accommodation of horses. I am sure it will benefit the horse breeders of the Province of Ontario.

I will now say something about power. The farmer is interested in electrical energy and cheap power. I have heard it said on the public platform by men who ought to be above setting any one class of this country against the other, and one part of this Province against the other, I have heard them say that Niagara power is only going to benefit a certain section. Sir, I believe that the benefit of Niagara power will accrue to 1,800,000 of the 2,800,000 people that inhabit the Province of Ontario. I do not exclude the farmer. I take my lesson and my belief from what Germany and France are doing for the farmers in supplying them with public owned electricity. We have a white coal in this country that is four times as valuable to this country as the black coal is to the United States. Cheap electricity is going to give the farmer cheap transportation.

To-day we are paying a high price for coal. We are paying $3,000,000 a year in duty on the coal that comes to this Province from the United States. Twelve million dollars worth of coal comes into this Province every year over the railway, and who is paying that; not the railways, but the men who ship their products by the railways, and who travel on the railway, and if we can give them cheap power we should get cheaper freight rates, and it is going to help the farmer in that way. There is another way it is going to help the farmer:—In France and Germany where electricity can be used, farmers are using it for running their cream separators, turnip cutters, corn shellers, threshing machines, and for the pumping of water. I saw in actual operation electricity used for the purpose of pumping liquid manure on the farms. The manure pit is built of cement, and the liquid manure is taken into a cement vat and is taken out on the fields by a tank wagon. It is pumped by electricity, the electric motor being taken to any part of the farm, and you must admit it is the richest form of fertilizer you can use.

How many farmers in this country save it, and how many would save it if it was so easy to pump and handle. On some farms they have an electric road constructed through the farm and it is operated by electricity supplied by the Government of that country.

What do we find in the Western States? There is a railway running 175 miles in Ohio, and they are charging farmers 4 cts. per kilowatt hour for electrical power, and the Cataract Power Company are offering to the City of Hamilton for ½ ct. per kilowatt hour. It costs $600 to install the electrical appliances and the farmer in the United States is able to pay 4 cts. per kilowatt hour, and I venture to say that is about double what it will be necessary to charge in this Province.

The farmer over there is able to do his work, chopping and sawing of wood, threshing, etc., at $2.00 per month, or $24.00 per annum. By this means you can eliminate the threshing machine engine, and goodness knows, that is not a very safe thing on a farm, and electricity can be used on the farm in a good many other ways.

There is a desire on the part of the Government of this country to give the farmer this cheap power. The companies who control this power are not interested in selling it to small consumers; their interest is to centralize at some central point; their object is to sell as much as they can as near home as they can, and to as many consumers as possible, by what we want in this country is many industrial centres because they will mean a home market in many farming districts. Why should not Guelph be a big industrial centre, why should all of the big industries be located at Hamilton or Niagara Falls? Is it not to your interest that the population of Guelph should not be 10,000 but 100,000, and then you will have a market near at home for your products. You are getting more for your goods here than can be got for them in England, because we read that the food of the country is apparently in the hands of the Trusts, and we can buy bacon in London that was sent there from Canada as cheap as we can buy it on the home markets.

Municipal owned electrical power will give you a home market.

No one here will say that it is not in the best interests of the people of this country that the land should be in the hands of the people, that we should have many small land owners, and that we should not have, as they have in the old land and Continent of Europe, a few land owners, and where the toilers of the soil do not own the land.

I thank you, Mr. Chairman, and I hope something good will come to the farming community by this great gathering, and I hope it will go on as it has in the past under the leadership of Honorable Mr. Monteith, not because he is a Conservative, but because he is a farmer and knows his job.

THE NECESSITY FOR AMENDING THE "ACT FOR THE PROTECTION OF SHEEP AND TO IMPOSE A TAX ON DOGS."

By Robert Miller, Stouffville.

This is the first opportunity I have had to say a few words with regard to the show and with regard to what happened last week in the City of Chicago.

I do not believe that any man who feels kindly to the people of this country should miss an opportunity to congratulate the boys from the Agricultural College on their great achievement at Chicago last week. I said once before to-day that behind all the good cattle we have in this country, we must have the men, and we must have the boys to build on, and it gives me a great deal of pleasure to congratulate the boys at the College on winning that trophy and I do not think we can repeat it too often. I also wish to congratulate the men who exhibited sheep there. I presume a great many of you here to-night are sheep men. The winning of prizes at Chicago by sheep from Ontario will be a great benefit to the sheep-breeders. I also wish to congratulate the horse-breeders on their exhibit in Chicago. It was a wonderful sight at that great International Show when the Clydesdales came out to show for the sweep-stakes, that there was nobody represented there but Canadian breeders and importers, and it was a repetition of what happened last year in two of the most important classes there, the Clydesdales and the Hackney Horses. When they showed for the sweep-stakes there were only Canadians in the ring, and that is the reason why every man in this Dominion should feel proud of himself and his associates.

In the cattle class we did not expect very much. We had one representative, Mr. Amos from Guelph, who showed two or three animals and he made a good mark, but a great many of the prize winning animals were bred from Canadian stock. There are a great many breeders of Shorthorns in the United States and they have been trying to breed a steer that could win the grand championship and they failed, until a Canadian came and helped them out this year and won the grand championship with a Shorthorn grade They have offered, for some years, $500 to any man who could produce a Shorthorn able to win that sweepstake. This was a Shorthorn grade, and I asked if that offer stood good and they said "Most certainly they would cheerfully give it to him and they only wished it was twice as large." They said "That is the way we feel about you Canadians," and that has done a great deal to obliterate any imaginary line that exists between this country and the people of the United States, as cattle breeders.

With regard to the subject placed in my hands for discussion at the present time, "The necessity of legislation for the protection of sheep from dogs," I must say it is rather a delicate question. A number of years ago, our then Minister of Agriculture framed a bill that he thought would do away with the killing of sheep by dogs. He suggested legislation that proved more drastic than he could carry through the Legislature. He suggested that each and every dog should be taxed from one to two dollars and as high as five dollars. That, in itself, appeared to be drastic legislation, but coupled with it was the suggestion that dogs should be shot whenever they were found outside of their own premises after certain hours. That measure was so strong that it has really been of no use to the sheep breeders of this country, for it was left to the Municipalities and has not been taken advantage of by them. In the northern countries they have troubles with wild animals. They are not difficult to legislate against because they have no friends, and the only question that comes up is, what bounty will be paid for their heads or tails. I heard a gentleman say, who lives in the country where the coyotes are being destroyed as fast as possible, it did not matter much because as soon as they got rid of coyotes the dogs took their places. We want to find some way of safe-guarding the sheep from dogs.

You have no doubt had a report sent to you entitled "The Sheep Industry of Ontario." That shows that the great majority of the farmers in this country agree that the sheep pay better by far than cattle, horses or swine, and that the industry is an important one, yet the sheep industry in this Province is declining fast. There must be some reason why the sheep industry is declining, while the majority of people interested in agriculture think it pays better than any other line of breeding, and while there may be other reasons, I believe one of them is this—I have always thought that the sheep industry seemed to thrive and do better when times were bad than when times were good. We have had a cycle of years that has been very profitable for those engaged in agriculture and during those years the sheep industry has declined. When a man is prosperous and has plenty of money, a sheep seems to be too small a thing for him to trifle away his time with, he wants a horse or a cow.

I believe a man who has a sheep should take care of it and a man who has a dog should take care of that. The sheep industry is one of the most important in this country, and the dog industry is considered by some people to be quite an important one also. If it is an important thing to keep good dogs, then it should be worth the man's while to take care of them and shut them up every night so that they would not destroy other people's property. That has been done for ages in England and Scotland where they have good

dogs and think a great deal of them. Although there are more dogs to the square mile in Scotland than in any other country, yet they have thousands and thousands of sheep running on the hills, and you never hear of such a thing as a sheep being worried by dogs. Why cannot we have something the same here? I do not know any reason why. It is my belief that every dog in this whole Province, no matter who owns him should have a tax put on him, and I think that tax should be a substantial one because what difference does it make to me whether I pay a tax on my dog or on my house, and the taxes have to be paid anyway, and I think when a sheep is killed by a dog the full price should be paid for that sheep—whether it is worth $5.00 or $75.00.

When this legislation was suggested by the Ex-Minister of Agriculture, he got letters from wealthy men who had a lot of dogs, and from poor men, telling him how much they liked their dogs, and they wanted to keep them and they would fight against any man or party who would put legislation on the Statute Book that would force them to pay a tax for keeping their dogs. I believe a good way would be to ask a number of dog owners and sheep owners to meet together and let them agree amongst themselves as to what would be fair and reasonable legislation. I do not believe that any high standard breeder of dogs in this country would say it was a fair and proper thing for the dogs to have the privilege of running about the country night and day destroying other people's property. I yield to no man in my love for a good dog and I yield to no man my dislike for the miserable cur that runs about this country doing harm. I do not say I am prepared to stand up here and frame legislation that would be satisfactory to the sheep owners or dog owners throughout this country, but I am very pleased to open up this subject for discussion.

Q.—What is the law with regard to dogs running at large? I think I have read of some place that a man can shoot a dog running on his place after night. I am in the habit of keeping from 200 to 250 lambs for the Christmas market, and I know I take that privilege very often.

THE CHAIRMAN: I think possibly Mr. McKenzie has solved that question in his case, and it might possibly work out in other cases. However, there is no doubt that very many valuable dogs might be killed in this way, but the law is there and those who wish to live up to its privileges have quite a wide margin to work on.

A MEMBER: The Act might be amended in some way so that 25 rate-payers, could not petition to have the dog tax taken off. I think it should be 150 rate-payers.

A MEMBER: Whatever the law is, it should be compulsory all over the Province.

A MEMBER: This law seems to be a pretty fair one, but our experience is that very few dogs get out between sunset and sunrise. The experience we have in the Municipal Council is that there is not one case in 100 that the proof is taken home to the owner of the dog, and the Municipality generally has to pay the two-thirds value.

I agree with Mr. Miller, that very stringent measures should be used because sheep never do as well again after they have been chased by dogs. Mr. Davies of Toronto had to get rid of one of the best flocks in Ontario just through dogs running at large from sunset to sunrise.

THE CHAIRMAN: There is no doubt this is a matter for the municipalities to deal with. Many of them have repealed the dog laws. The question of the compulsory dog tax is a very wide one. I remember when the Act came into force, that 25 men came to the council and asked to have it repealed and

I felt that that was an injustice to the sheep raisers, but we had no other alternative. It might be well to increase the number necessary to have the law repealed. A great many would be willing to forego the privilege of keeping a dog rather than pay the tax.

Q.—Might it be well to pool the dog tax and then the towns and villages would have to help pay for the sheep?

THE CHAIRMAN: If that was the case you would have a large number of sheep killed. There would not be the close scrutiny that there is when the expense falls on a small number.

A MEMBER: I do not think the sheep raisers have been aggressive enough. It is almost impossible to keep sheep within 2 or 3 miles of any town, village or city in Ontario to-day. Farmers have been compelled to give up sheep raising entirely on account of the dogs, and I think it would be a great improvement if we had a dog tax double or treble what it was. I would suggest $5 on a dog.

A MEMBER: We have a dog tax of $1.00 for a dog and $2.00 for a bitch, and we pay two-thirds of the value of all sheep that are killed. We realize $425 from the dog tax.

A MEMBER: When you consider that only two-thirds of the value of the sheep are paid for it means a very heavy loss to the sheep breeders.

A MEMBER: How would this plan work out, to give a man liberty, if he saw a dog running loose at night, to kill him?

A MEMBER: I think the taxes should be increased on bitches. A number of people make it a business of raising dogs, and it should be made compulsory that the municipality should collect these taxes, and I think there should be inspectors appointed to judge the value of the sheep and they should pay the full amount. In the part of the country where I live the sheep industry has gone down until only a few people are keeping them. A gentleman who had been building up a flock for 30 years, had 30 on hand of the most beautiful sheep and he woke up the other morning and found 25 were torn to pieces and the other 5 were of no value whatever. He obtained two-thirds of the mutton value for these sheep and they were worth three times what he got. It is not always the curs that do the damage. Some of the dogs that are most injurious sheep dogs, are dogs that are kept at home and taken good care of, and yet they were out at night killing sheep.

A MEMBER: I think if a man shoots a dog when it is after sheep he ought to be paid for doing so, and I think it would be a good plan to give a reward of $5.00 to everybody who shoots a dog when it is after sheep..

THE CHAIRMAN: There is no doubt dogs are a great detriment to the sheep industry. Sheep are hard to keep in an enclosure and I know of no more fertile source of making bad neighbors than the sheep that will go through a fence. I have had to act as mediator between people who had law suits over sheep. No doubt dogs are one cause of the steady decrease in sheep. Sheep make for cleaner farming because they destroy many weeds and the matter that has been brought up here to-night will be well considered in the Department of Agriculture. You have made suggestions here to-night that I believe can be well embodied in any future legislation dealing with this question.

MR. CAMPBELL: There is no industry on the farm to-day that gives such a large percentage of profit as the sheep industry. There are men here I am sure who have been selling lambs right along from the beginning of harvest until the late fall months at $4.00, $4.50, $5.00 and $5.50 and $6.00 per head. Take $5.00 as the average and I say one half of that is clear profit. I think we should face this matter in a sensible way.

A Member: Dog owners have the advantage over the sheep owners in this respect that when a petition of 25 ratepayers is presented to the council they have to repeal the dog tax. I think it should be necessary to have 100 instead of 25.

THE ECONOMICAL FEEDING OF SWINE,

By T. H. Mason, Straffordville.

I do not propose to take up a great deal of your time. I must admit that it is extremely difficult to get up a great amount of enthusiasm on this question of hog raising at this time, because, never in my memory do I recollect such peculiar conditions as we have had this fall. Food stuffs have been very high and the price of pork has been low. We are getting reports from all over the Province that the farmers are going out of raising hogs, and I think that is a great mistake. Within all probability hogs will be reduced in this Province by 50 per cent. A leading hog raiser told me yesterday that in his neighborhood he was satisfied the reduction would reach 75 per cent., and in my district it will reach 40 per cent. The people have been simply going out of hogs like a flock of sheep going over a fence, and as a consequence you will see a very great scarcity next summer, and a very great reduction in the number of hogs going on the market, and it will take two or three years to recover from this scare.

We have been endeavoring for years to build up a great hog raising industry in Ontario, and we have succeeded. Our product has a good reputation in the market on the other side of the water, and we have a constantly increasing domestic demand in our own country. This sort of thing is not confined to the Province of Ontario, as the same conditions exist in the United States, Denmark and Ireland.

The first factor for successful feeding is the man. It is not absolutely necessary that he should be Irish, but it is a decided advantage if you have some Irish blood in your veins. A man who likes the business will make more success out of hog feeding. You cannot make a success of it if you leave the work to the hired man, unless he is a better man than you are.

Then comes the question of breed. That is a question we never agree upon, but there is a tendency to revert to the short, thick, fat, chunky hog, under the impression that they are the cheapest feeders, and they produce meat more cheaply than the longer type of hog that we have been trying to introduce into this country for years. Now, I think it is a mistake to go back to the fat short hog. If I were going out this afternoon to buy a lot of hogs for feeding purposes I would throw out every thick, fat, short hog in the lot. On the other hand, in the early days of this bacon trade we had an exaggerated idea of what was required, and the first importations brought into the country were extremely bad feeders. The Yorkshires and Tamworths, especially the Yorkshires, were exceedingly bad feeders. They were great long, coarse-boned, bare-backed, flat-sided brutes that you could not make anything out of, but the modern Yorkshires and the modern Tamworths and Berkshires are all right. There is no use attempting hog feeding unless we have the right kind of hog to start with. Get the best sire and dam you can get. $5 or $10 saved on the purchase of a sire is simply money thrown away, because one sire might mean a difference in one season of $100, and possibly more.

Another mistake we often make is that we wean our pigs too young. I believe in getting the little pigs started off to eat at three or four weeks

old, and there is nothing better than a little milk and shorts to get them started. Then feed them liberally, and by the time you wean them, at eight to ten weeks old, you have a big strong lusty pig. I am satisfied that a great many of our people lose all the profit in the business by the way they handle pigs at the weaning time. I am a strong believer of raising little pigs out in the open. Of course, you must have shelter for them in storms and for feeding purposes, but let them have access to the earth; keep them on the ground and give them exercise and give them green food and you will get them to develop bone and muscle, and a strong stomach. They are always on their feed and always at their feed. I like to have them out on a clover pasture or on peas and rape. For later pasture, rape makes a satisfactory pasture. Of course, you must feed the pigs reasonably well at the same time. We all know that for economic production a mixture of several grains fed together will give better results than any one grain fed alone.

I cannot lay down a hard and fast rule for you this evening. Some seasons oats might be very satisfactory, but if you get such a combination as high priced oats, it would be foolish to advocate them, especially when we have to purchase our feed. During the winter months, in a root growing country such we have, I believe roots are a good food and should compose a large proportion of the ration, and I believe in boiling the roots and feeding some grain. Do not load them up with a great lot of water, feed the roots in rather a thick batter and mix in your shorts and middlings, and whatever grain you may happen to have. For larger pigs, pulp the roots and feed the meal sprinkled on. I always like to take the chill off the food and always see that the pigs clean the troughs up and do not leave any material in them. A great many people make the mistake of having food left in the troughs. Pay particular attention to cleanliness, have dry beds and give them dry straw to lie on. In the winter months give them wood ashes and charcoal and sod or earth of some kind. Earth seems to be absolutely necessary to keep the digestive organs in good condition. Milk is one of the best things for a pig. Nothing lengthens them out like milk, if properly handled. I believe the hog industry has come to stay, and that we should stay by that industry.

Q.—At the present price of wheat and barley and oats, is not a farmer justified in disposing of his hogs?

A.—Do you mean to get out of the business altogether?

Q.—No, to get most of them out of the way?

A.—I believe in staying in the business. A man told me this fall he was making money on his cows and losing on his hogs. The people had talked to him until he got panic stricken. He had his farm on shares and an inventory was taken of the amount of grain on hand, and he had to keep an accurate account of the stuff he had bought. On looking into the question he found he had bought $84.58 worth of shorts. The corn used was valued at $50, and they had eaten 25 bags of rye. 60 bushels of rye at 70 cents a bushel amounted to $42. $40 was allowed for the keeping of the breeding sows and $15 for the whey and $15 for the pasture, bringing the cost of the hogs up to $248.84. A week before he had sold hogs to the value of $199.75, and he had 7 hogs on hand that would run from 120 to 125; at that time hogs were $6.00 a hundred. I asked him how he would like to take $50 for these 7 hogs and he thought better of it. Of course, he could not make as good a showing as that a month later, but still, I am satisfied that at the end of the season they would show a substantial profit, and I think it is a great mistake to go entirely out of the business. Unless this financial depression completely upsets all calculations you will get big prices for hogs next summer.

THE ECONOMICAL FEEDING OF SHEEP.

By Lt.-Col. Robt. McEwen, Byron.

I am asked to introduce to you the subject of "Economical Feeding of Sheep," a matter of considerable importance, still not one that looms up as prominently as it does in the horizon of the feeder of cattle and horses. The very high values to which fodder and all grains have risen compel us to study the question very closely; and while sheep are, comparatively, very small consumers, yet it is none the less essential that they should show a profit on what they do consume. The stampede of cattlemen to get out from under the business this year has alarmed some branches of trade, which have gone out of their way to circulate their opinion that farmers are not wise to curtail their feeding operations by selling off their cattle. But whilst we hear so much of immature and lean catttle being marketed, there are no indications of the sheep men following suit, their business evidently being sufficiently encouraging to stay with it. It has been pointed out to me that my subject should be treated from a feeder's rather than from a breeder's point of view; but in this Province of Ontario, only lambs are fattened for slaughter in any quantity, and therefore what is of more general interest is the economical feeding of the breeding flock, whether of grade or pure breeding.

Profitable sheep breeding and feeding depend upon the selection of a breed or cross that is adapted to the environment; and the providing of a suitable variety of feeds. In Britain we find distinctive breeds of horses, and more especially, breeds of cattle and sheep that have identified themselves with, and often are almost wholly confined to, certain counties or group of counties, similarly situated as to climate, soil, and quantity and quality of pasturage. As a matter of fact, this is something that does not apply only to domestic animals: it is equally true as regards the human race, and plant life as well. Exotics and the Coolie must have heat, while the Esquimo revels in furs and an oily diet. The Highland cattle are no more to be found in the fens of Lincolnshire than is the Shire horse on the Shetland Islands. The black-faced mountain sheep of Scotland belong to heather-growing hills, and the delicate flavor of their mutton at once depreciates on change to wholly grass pasture. In our own province we find light horses and the smaller and more active breeds of dairy cattle preferred in the districts where scant pasture prevails, and where the growth is abundant our beef breeds develop robust form, wealth of flesh and mossy coats. We may, therefore, conclude that it is of the utmost importance in order to most economically produce mutton that a breed should be selected that is adapted to the soil upon which it must graze. In regard to supplementary green feeds, nothing appears to give better returns than rape and cabbage. During winter for roughage, lucerne, red clover and bright pea straw are best, with the addition of a moderate quantity of roots. Except for fattening purposes, very little grain is required; and when it is fed, a mixture of equal quantities by bulk of bran, oats and peas give good results. The quantity of these to be given must be determined by the breed, that is, the size of the sheep; a ration for one sheep weighing 250 lbs. would be sufficient for two sheep of same age weighing 125 lbs. each. A sheep will eat a little over one pound of hay, one pound of grain and five pounds of roots per day for every 100 lbs. of live weight.

Amongst other essentials to economical feeding are, freedom from ticks, ample light and sunshine in quarters that are dry and well-ventilated, free access to salt, and pure water.

R. W. Wade, O.A.C., Guelph: When a Kansas farmer was asked what he did with his weeds, he said, "I sell them as mutton at 6 and 7 cents a pound." That may be true in the summer time, but the time of the year when the ground is covered with snow has come and the crop is in the barn, and the question before you is, how can you best manage your flock of sheep so that you will come out ahead at the end of the year. What will you feed that will cost you the least, or how can you feed so as to have the best results in your lamb crop. A man having full bins and plenty of clover hay and roots is able to feed so as to get the best results. Clover hay, oats or bran and some roots, if fed to ewes taking enough exercise should give a give a good lamb crop in the spring. But suppose you haven't the clover hay and you haven't the oats and you haven't the roots, but you have the flock of sheep, then the question presents itself to you: "How am I going to get through the winter?" This is the problem, and I have no doubt that the sheep men before me in a year's time will be able to give some pretty good experiences in the way of economical feeding. You have some clover hay—I do not suppose there is any too much. I am not talking to the man with the full barn, because he does not need to be here talking of economy. You may have timothy hay and corn silage and roots, and you are likely to have oats and you may have peas. You would not think of feeding wheat at its present price, and you have to buy the corn. You know you cannot feed sheep on oat-straw alone and bring them through and have strong lambs. You know that you cannot win out that way, and that you must have grain with it. Silage, if too rich in corn, is not a safe food for the ewes, and if it is too immature it is absolutely dangerous because it contains too much acid. If given to ewes it should be fed very sparingly, but you can help out the ration with roots, and if you cannot get oats you can feed some bran and corn. Corn is rather fattening and should not be fed too liberally to breeding ewes. I will give you a few rations for lambs. You will need grain to keep them growing, and corn is found to be the cheapest of all. Whole wheat is slightly cheaper than ground wheat; whole wheat is better than oil meal and gives more satisfactory gains. Alfalfa and clover are about of equal value. Corn meal, whole oats, wheat, bran, and cracked peas are given in the order of the greatest gain in growing lambs. Corn meal comes first, cracked peas second, wheat bran third, and whole oats fourth. Oats is the best food of all for the breeding animal, but when it comes to putting on gains it stands fourth.

Q.—Do you mean the grains would give gains according to cost?

A.—No, pound for pound. You have your market price of corn and oats, and you know which would be the cheaper pound for pound, and you have to work that out for yourself.

Q.—What about whole barley?

A.—I do not know much about barley as a sheep food. I do not think I would care to feed barley to ewes, it is rather heating food. Corn is not good for breeding ewes unless fed sparingly, and wheat should not be fed too liberally. In case you are short of oats and you have oat straw, you must have some concentrate, and a moderate amount of corn or wheat before lambing time might do.

Q.—I have had best results feeding barley. I have fed pure-breds for 16 or 17 years, and the cheapest way I could get them through the winter

is feeding them oat-straw and wheat chaff and a little barley. It brings them out strong in the spring and they have strong, hardy lambs. I feed whole barley.

A.—You have just heard from an experienced sheep man that he has fed barley very extensively to breeding ewes with good success.

Mr. WADE: Here is feed for 100 lambs. They were fed corn, 132 pounds; oil meal, 33 pounds; clover hay, 110 pounds; and they made a gain of 34-100 of a pound per day per lamb. And here is another ration in which they fed barley, 170 pounds; oil meal, 19 pounds; timothy, 72 pounds, and the gain in that case was 33-100 pounds per day. Another ration was Alfalfa, 290 pounds; corn, 67 pounds, and the gain was 29-100 of a pound.

After all is said and done, it really is the man that does the work; because one man may use a ration that might be exactly suited to sheep and get very poor results, and another man might use a ration that is not so suitable and by skilful feeding and careful management get much better results.

Q.—I have a good many sheep to feed, and I believe good corn in the shock, sweet corn would do—what do you think of cutting that up and feeding it?

A.—I did not say anything about it because I did not think any of you had corn fodder. At the Wisconsin Station they fed 175 pounds of corn fodder, 50 pounds of oats or bran, and 310 pounds of sugar beets per day to 100 ewes, and they gained in 8 weeks 10.6 pounds each, and apparently there were no ill results when lambing time came; in fact, it was one of the most successful years they had. Another ration tried at the same time was 110 pounds oat straw, 50 pounds of bran or oats, and 310 pounds of sugar beets, and this only gave a gain of one pound each in eight weeks.

A MEMBER: There is one of the best sheep feeds that has not been mentioned, and that is beans and bean straw. I buy all the beans I can get at one cent a pound and I think it is the cheapest grain I can buy, and they will do remarkably well on it. They will take one feed of bean straw a day, and with a few roots and very little grain, and in one flock near me, although the lambs did not come till May, they had one of the finest flocks I ever saw.

THE ECONOMICAL FEEDING OF BEEF CATTLE.

BY JOHN CAMPBELL, WOODVILLE.

The question before us to-night is not what may be done, or what we may grow in the future, it is how are we to study and practice economy with the conditions existing at the present time, and there is no doubt at all that the question of how to take stock through the present winter is an important one.

We are pleased to find, when we have been going out from our homes and have been corresponding and comparing notes with each other to find that the "panicky" feeling which existed in the country two months ago, when it was thought that things were going to be very bad, is not now so much in evidence. We have been used to such an over-abundance of feed upon our farms in past years, that because we had a comparative shortage, we were led to think that we were going to suffer want, and that our cattle were going to be starved. We now know that with the exception of North-western Ontario, along the Georgian Bay and in the eastern part of the Province,

there is going to be plenty, and I would not be surprised when the spring of the year comes, if feed was not more plentiful in our barns than it has been in some years gone by. There are two kinds of economy, false and true. I think it is false economy to allow good stock to fall off in condition because the price of grain is high. It has been well said to-night, "do not save your grain and have your stock suffer." On the other hand I think it would be false economy for any person to carry more common or inferior stock than he has feed for through the winter, and have to buy at the present prices. I believe this will prove a blessing in disguise to the country; it will purge the country of a good deal of poor stock. It will be like a dose of medicine to ourselves when we get out of sorts.

You all read of the cow that was sold in Toronto for $3.00, and lots of them at from $3 to $8. That class of cow is no good at any time. The dairyman will tell you that there are lots of cow boarders kept in the Province of Ontario when feed is plenty, but I pity the man who keeps them this winter.

We have a larger quantity of straw than we thought we had, because it is better straw than we had in other years, and I believe our straw this year will go twice as far, if we practice economy from the beginning.

A Scotch farmer was very much given to grumbling, and years when everything was plentiful, fine crops and fine weather and a good harvest, a neighbor met him and said, "Surely you have nothing to complain of this year," and he said "No, not very much, but there is no spoilt hay for the young calves."

Many of us have plenty, some of us have our bins full of grain, which will bring a high price in the market. If we have to buy what should we buy? Oat chop is $34 a ton, barley meal $26, pea meal $28, bran $20 to $24, corn meal $28, and oil cake $33. At the present price of bran where is the man in this audience who will buy it at $20 or $24, when it would be far less costly to use good corn meal at $28, or barley meal at $26, or pea meal at $28.

There is one kind of feed, which is produced in the Province of Ontario that is being neglected, which is going out of our country, and comparatively few people in our Province use it. It is the cheapest kind of food I know of to-day, and that is oil cake. At the present time oil cake can be bought and laid down at any station at $33 a ton, or $31 F.O.B. at the factory, and in car load lots it can be laid down at $31 a ton. Now where it is necessary to buy grain to carry over the stock I know nothing that is cheaper than oil cake, and I believe it can be used profitably to a limited extent for horses as well as cattle.

I sent from my home yesterday, a bunch of cattle for the Toronto Christmas market. We put them in the stable before the bad weather came, about the middle of October. They were put in at nights and were stall fed about 6 or 7 weeks. The high price of grain never tempted us to sell, but we practiced economy by laying in 4 tons of oil cake and they were fed at the finish up to 4 pounds cake with 6 to 8 pounds of mixed meal, and when sold weighing over 1,300 pounds each, they made five and a half cents a pound. The butcher told us that cattle fed oil cake please the customers so well that he wants them again. I have found a good thing and I want to pass it around, and think it a mistake that we as farmers in the Province of Ontario, should allow that valuable food to be exported to the old country. The British farmers are using it by thousands of tons, and there is no other feed which will put fertility into the soil like oil cake.

I think it would be the worst kind of economy to sell our good cattle, even if oats are 60 cents a bushel and barley 80 cents. We should not sell

our cattle, or starve them, and have them go out skin and bone in the spring. The chances are that good cattle will be in brisk demand the coming summer. Those who will profit by the probable increase in values are the breeders who maintain their faith in the business, who will feed fairly well the winter through, and that, if seemingly, rather costly.

Those practising false economy in being tempted to sell short of grain or other feed while long in cattle, will regret too late their yielding the dollar at a distance to the near-by dime. 'Tis the man who maintains the true and steady pace in all his management of the herd, who will have ample satisfaction and full returns later on. Trying as the situation may be to the minority, we Ontario farmers as a whole, have much in our lot this season to cheer and encourage us, as even with possible necessary economy in places, the average condition is brighter than any in sight in the outside world.

J. H. Grisdale, Agriculturist, Central Experimental Farm, Ottawa: There are two or three things which we who are trying to feed this year must consider most particularly, and one of those things is economical feeding. I want to show you to-night that it is possible to feed economically and to make good gains on a cheap ration. To show this let me give you a few figures from experiments we conducted last year. We fed 40 steers and they made in 6 months, 425 pounds each, at a cost of something like $18 per steer. That was charging the feed at the prices they were selling for on the market. The principle on which we worked was to give the cattle a filler. If an animal is half full and he does not get sufficient to keep his digestive organs well filled and in good healthy condition, he will not do well, and therefore the first requisite of successful feeding is the filling of the animals, right up to the top notch. It is not necessary to give them an expensive filler. I know a man near here who, two years ago, started to fill his cattle with 15 pounds a day of pea meal; that was a great mistake. We can fill them up with ensilage or roots, or if you have not got these things, straw will do. One of the most successful experiments I ever saw conducted was where cut wheat straw made up the roughage part of the ration. We must, however, make the roughage as palatable as we can. The methods of making it palatable are various. One of the simplest means is to mix a certain amount of ensilage or roots. Another way is to add a little bit of meal and some water. That sounds like a bit of work but if the farmer is willing to make arrangements he will find that all the labor necessary for cutting straw is a bagatelle in comparison with the good results.

The filler being prepared, the next thing is the meal ration, which it is most advisable to feed. One of the best things I have found to start steers off with is bran in small quantities. The first thing is to get them well filled up with some roughage. I never think of feeding them any meal until they have been two or three weeks in the stable and then the first meal fed is bran. Then we gradually increase the amount and strengthen the bran by adding some kind of heavy meal. We add half a pound of the meal in a week or ten days and then another half pound ten days later. After that we add a pound every week or ten days. The rate of increase in the meal depends upon the period at which we wish to get them on the market, the quicker the increase in meal is made the quicker they will go forward and the less amount of roughage will be consumed. Basing my judgment on experience, I think that no steer should have more than from 800 to 1,000 pounds of meal in his feeding period, of from 6 to 6½ months. That is an average all around of from 4 to 4½ pounds of meal, certainly not more than 5 pounds of meal a day, if they are fed with this amount of meal and a good roughage ration then the steers are bound to succeed. One thing necessary in the ration is palatability, and that is best brought about by adding succu-

lence to the ration. For early feeding turnip tops are good. They open up the digestive organs and set the steers going by getting the digestive organs in good active condition. From what I can learn from feeders throughout this Province and further east of here, there has been too much meal fed relative to the amount of roughage. No feeder, in my opinion, should get up to 8 or 10 pounds of meal until the very last month of the feeding operation, to get to that quantity before the last month is to waste your meal. Every pound of meal should be thoroughly digested.

We have found gluten valuable, it comes from starch factories and is sold at from $24 to $30 a ton. You can buy gluten meal on the market to-day at from $26 to $27 a ton that shows from 18 to 20 per cent. of protein, but I know of gluten meal on the market at $29 and $30 a ton that shows double that amount of protein. There is no comparison in the value of these two meals. One is worth as much as oil meal and the other is worth about as much as bran. Oil meal is a good feed and it is usually fairly pure. It is capable of adulteration, however, as was obvious in the United States before the feed regulations came into force, when you could not buy oil meal up to the standard. The first thing we know our manufacturers will be getting wise to the possibilities here and we will get weed seeds and other stuff mixed with the oil meal. You can, of course, buy the oil cake unground, but it is considerable trouble to grind it.

There has not been very much done to test the value of frozen wheat for feeding steers. But there were one or two experiments made in the West. It has been found a valuable food for steers. We have bought a car of it with part of which we propose to feed steers at the Experimental Farm. We have 40 steers waiting to be fed on this grain. We cannot get the wheat here as quickly as we would like to, so if any of you are going to be in need of this feed in the month of January you should order it at once. The prices up west are from 20 cents to 30 cents a bushel, according to the quality; 25 cent wheat, I understand, has a good feeding quality, but wheat that can be landed at from 50 cents to 60 cents a bushel in Ontario should be of good value at the present prices of feeds of all kinds.

Q.—Is that reasonably free from weed seeds?

A.—I have no doubt if it comes from a good farm it is likely to be good, of course if you are feeding it to steers or swine you would grind it and the weeds would be destroyed. The stock do not like these weed seeds.

We have seven or eight hundred pounds of ground weed seeds sent us and I tried for two weeks to feed it to all kinds of stock. I had 30 sows in one bunch and they were only getting one pound of meal a day, and I tried to get them to take one quarter of a pound of the weed seeds and three quarters of a pound of bran, and they would take the bran and leave the weed seeds, they managed to sort it out, and where it was thoroughly incorporated with shorts they would not eat it at all. We tried it on a bunch of steers and they would not take it, and dairy cows would not take it. Now I am feeding it at the rate of two per cent. in a meal mixture and they will have to take it. I hope it may do them good. I hope to see it act as a tonic. If you are interested in getting this wheat from the west you have two or three men willing to help you. At Winnipeg you have Mr. G. H. Greig, Western Live Stock Commissioner, and he will be in communication with farmers whose farms are reasonably free from weeds, and then you have Mr. James Murray of the Experimental Farm, Brandon, who will be glad to help you, or Mr. Angus McKay at Indian Head, Sask., who knows every farm in that district, and he would be quite willing to help you to secure a good sample.

REPORTS OF JUDGES ON POULTRY EXHIBITS AT WINTER FAIR, 1907.

By N. Cosh, Port Dover.

Black Orpingtons: First cock a specimen of nice type shown in full feather and bloom; second has better color, but not yet finished; third has grand comb and head, excellent color, very low set, and with a properly furnished tail would beat them all; fourth, another good one, but not quite ready. First hen, good all the way; second, larger, but rather fat to show well; third, close up; fourth, has been a good one, but now too old to show well; fifth, fails in color of lobe. First cockerel a large one with good head and fine color, excellent in shape of back and tail, in fact shortening his shanks a bit about covers his weak points; second, with a little more time will be quite equal to first; third fails in shape of breast, back and tail; fourth carries tail too high, giving the back an extremely short appearance, otherwise a showy fellow; fifth, a nice one, but not as massive and well finished as the leaders. First pullet, a good one, with grand type and color; second, not far behind; third, not yet ready; fourth, fails slightly in shape of back and tail, her plumage has an excellent sheen, but not free from purple barring; fifth, has good color, is rather plain yet, but will improve with development.

White Orpingtons: I regret to say several of the best specimens in this class were barred from competition owing to their late arrival. The winners were of average quality, lack of whiteness in plumage being the prevailing weakness.

White Minorcas: What has been said of the White Orpingtons, in reference to color, will also apply here. The winners were specimens of good type.

Black Minorcas: First S. C. cock a grand all-round bird, excellent shape of body, just a little more length to thigh and shank would improve him: second has grand color, but is just the opposite to first, has too much daylight under him, and carries tail too high: third has grand color, but is beginning to look old; fourth has grand color, and in good feather, but loses on type. First hen wins on condition, has nice clean comb and head points, excellent color and finish, fails slightly in fullness of breast and depth of body; second and third like sisters, better type than first, but are not quite ready yet; fourth fails on comb. First cockerel has grand head, nice straight, long back, and carries tail at proper angle, another week or two will improve him; second, a large one of right type, loses to first on comb and tail; third has marvellous color, but is rather stilty and weak in shape of breast; fourth, with more age, will hustle any of them. The pullet class was certainly a rare bunch to behold, the first winning on type and head points, and about all the faults she possessed were of the good order; second is as green as a bottle and right in bloom; third and fourth losing slightly on head points. I don't remember ever seeing a lot of females shown in finer bloom.

Rose Comb Black Minorcas: First cock starts off with a good comb and head, fine in shape of body and carriage of tail, and faultless color; second, equal in head points and color, but loses on size and shape; third, a big rangy fellow, fails in color and comb. First hen a nice smooth one with

good comb; second has a nice carriage and shape of body, loses in color and shape of tail; third, loses on size. First cockerel has nice type and color, excellent lobes and fair comb; second has grand color, but is rather stilty and a bit snakey in head; third falls short in color. First pullet a neat one with splendid color, nice comb and lobe; second, very large, in fact too large for an ideal rose comb; third, loses on comb. A general improvement in combs in this variety is quite noticeable over former years. This is an onward step and should not be lost sight of.

Black Spanish: Not a very large class, but quality good, notably first cockerel, which possesses a very long face with rare smoothness of texture.

Judged by James Tucker, Concord, Mich.; Reported by H. B. Donovan, Toronto.

White Wyandottes: A grand collection of 29 cocks, 40 hens, 50 cockerels and 53 pullets, in which there were few poor ones, and none downright bad. Mr. Tucker went about his work as if he knew it, and his decisions met with almost unanimous approval. It is more and more evident that amongst the good ones the whitest birds properly fitted have all the advantage. Those in poor feather, dirty in plumage and with sap or cream in quill or fluff are sadly handicapped in classes of this size.

Cocks: First an easy winner, very white, good shape, perfect legs, neat head and in grand feather of which he has plenty; second, very blocky, full breast, good back, well furnished, good legs, fails in color; third, nice type and color, neat head, good legs; fourth, white, neat head, good neck and breast; fifth, very neat, good breast and color; sixth, nice blocky type, grand full breast and sound color, except a bit sandy on shoulder, very neat head, and the best of legs; seventh, good back and color; eighth, very white, neat head, a bit plain in shape; ninth, nice bird, wants time, a bit up on pale legs, has a neat head; tenth, a big white bird, very pale in legs.

Hens: First hen white, grand legs and head, nice in back and breast; second, pure white, and our choice, a big hen, excelling in back and breast, and with wings carried in such a way that they serve to augment her grand body, a bit paler in leg than first; third, also a grand hen, but not the color of second; fourth, very white, good body, very neat head, nice back; sixth, nice type, very white, fair legs; seventh, nice hen, not yet ready; eighth, nice one, white, neat head; ninth, big hen, grand broad breast and back, wants time to whiten out.

Cockerels: First, beautiful cockerel of excellent type, splendid back and very white. He has not the best legs in the class but carries a very neat headpiece; second, nice color, round neat head, good neck and hackle; third, nice type and sound in color; fifth, big, full, nice head and legs; sixth, similar, shade longer in back, grand legs and lots of work in comb; eighth, large bird with good body; ninth, a big blocky chap, grand back and legs.

Pullets: First, very blocky, very white, very full breast, with best of legs and neat head without a perfect comb; second, grand full back and breast, splendid type, the best of legs, paler in lobe that the winner; third, nice type of pullet, good legs, nice breast and head; fourth, nice type and shape, a little pale in legs; fifth, beautiful pullet and grand fit, full broad breast, excellent back, with perhaps just a little too much cushion, very white; sixth, neat full bodied pullet; seventh, very white, nice full breast; eighth, nice full breast, very nice head and legs; ninth, good color and good body; tenth, nice type and blocky pullet.

Golden Wyandottes: A grand lot, first cock large, lustrous color, grand breast; second, a nice one; third, a very fair one; fourth, a good one but badly shown.

Hens: First and second, sound color with good lacing and good bodies; third and fourth, large, nice hens.

Cockerels: First has nice saddle, hackle and breast, good legs and neat head; second, nice shape with grand legs and breast, and moderate comb.

Pullets: First, laced all over, neat, good body; second, small, but beautifully laced; third, young, well laced, full breast; fourth, larger and darker but with poor legs.

Silver Laced Wyandottes: *Cocks*: First, a large bird with good breast but poor legs, moderate in top color; second, a good one; third, grand breast and wings; fourth, large and sound but not through moulting.

Hens: First had good body and regular Sebright lacing; second, nice bodied hen, not quite so open.

Cockerels: First, good breast color, grand legs, well furnished back; second, grand breast, neat head, very sound legs and wings, a bit brassy on top; third, big, full breast, broad back.

Pullets: First, a grand bird, laced all over, showing plenty of pure white, neat head, fair in legs; second, good body, nice open lacing all over; third, is not so distinct in black as first and second, has good legs; fourth, a big sound pullet, a little on dark side. A lot of other good pullets in this class.

Columbian Wyandottes: This class has jumped right into favor judging from the entry here, and the quality on the whole shows a great deal of improvement, though most of them yet lack type and soundness of color. The judge considered that the first cockerel and first pullet were as good as any he had seen; the former is quite a Wyandotte in shape, low set and with a good body, sound tail and good hackle; the pullet is very pure in her white, a very good shaped tail and hackle and splendid legs. In old birds the awards were placed on birds that won with some ease, especially first and second in both classes; the second cock was a bigger bird than the first but not quite ready; he was not so sound on top; the first hen was a good Wyandotte in type with size and depth of body, bad in lobe; second hen, a nice clean color, a bit narrow.

Partridge Wyandottes: These made good and big classes and had lots of quality, especially in the females. The cocks were a very good lot; the first hen was beautifully pencilled all over, good size, full breast, dusky legs; second, a good hen in color with some fault in legs; third, a very nice breast, none too large.

Cockerels: A very nice lot.

Pullets: First and second, well pencilled, but dense, plenty of sheen, good size and depth, neat in head but with very dusky legs; third, yellow legs and very nice color.

Black Wyandottes: Quite a nice class. Birds still troubled with dark legs, the only yellow legged ones being disqualified for white in hackle and wings. It seems almost impossible to get the yellow legs and pure dense black feathers. In old birds the winners were well ahead. First cockerel, excellent shape, very lustrous color; second cockerel, broad and sound, a bit overdone in comb; first pullet, a typical Wyandotte in shape and color; second, quite grand in color, a bit longer in body.

Buff Wyandottes: *Cocks*: First nice type, good back and flow of feathers, good sound wings and legs; second, quite nice shape, good legs and head, sound wings, very nice color; third, nice shape, good top; fourth, quite dark enough, fair shape.

Hens: First, even, a bit shafty, in full feather, good legs, broad, sound wings; second, good shape, very full breast, fairly even.

Cockerels: First, nice type of Wyandotte, even, but much darker and plainer in back than second; second, nice shade, even top, grand legs, sound wings, round breast, nice shaped back; third, nice flow of hackle feathers, good back and breast.

Pullets: First, nice type, grand legs, even, though a bit dark; second, darker than third, and not so even, shafty, too, grand full round breast, sound wings and tail; third, nice grand legs, nice type and color, sound, a bit shafty on wings, neat head.

Silver Pencilled Wyandottes: While the exhibits in this veriety are not so numerous they show quality all through.

By H. P. Schwab, Irondequoit, N. Y.

The Plymouth Rock classes were a pleasant surprise to me. The general quality of the birds shown, was far above my fondest expectations, and while the winners were birds of exceptional merit there still remained birds unplaced of high quality and good enough to win at most any show. In shows of this kind the great trouble we have to contend with is, that though prizes from first to tenth are awarded, still, with even this, there are not ribbons enough to go round to all deserving specimens.

Barred Plymouth Rocks: First cock a splendid specimen, typical shape, sound, clear color, uniform all over, extra head points, and shown in the best of condition; second, another typical Plymouth Rock, close up, not quite as well barred, good, clear, strong bird; third, shown well, but not quite finished in tail, should be a strong breeder; fourth, a grand bird of clear, even color, just the shade we like, but at this time not wholly finished in feathers, good head and eyes, beautiful shape; fifth, another grand bird in shape, also unfinished in hackle and tail, extra good head for a cock. First cockerel, a good winner from every point of view, fine shape, with clear, even color all over, grand head, with comb ideal in shape, under color clear barred, a bird fit to win at any show, perfect condition; second, a young bird of quality, in shape similar to the first cock, choice color, finely barred, strong eye, a promising bird; third, a half shade light in color, snappy barred, extra under color, elegant head and stroug eyes; fourth, another young bird of choice shape and color, with extra head points; fifth, in style similar to first, not as well matured, lacking principally in hackle and tail, pure yellow legs and considered a most promising youngster. First hen the kind we rarely meet with, extra shape and just the proper shade of color, beautifully barred all over, rich red eye and good legs; second, choice narrow barred hen of grand style and shape, not shown in the best condition; third, similar to first in color, lacks some in shape, good head and legs; fourth, another similar to first in color, rather large and not as even in neck color, strong eye, fair legs; fifth, a very good one, well, but not as finely barred as other winners, good eye, fair legs. First pullet, a gem of the purest quality, ideal shape and just the right shade of color throughout, barring narrow, clear and even; second, another beauty, unfinished in tail, shade of color and barring of the best quality, extra head points;

third, a clear, snappy barred bird, close up in quality, fails a mite in neck color and color of beak and legs; fourth, a typical bird, grand in style and surface color, not as sharp under, a real good one, strong eye; fifth, extra good shape, and good color, just a little coarser barred, good eye and fair legs.

White Rocks: First cock a clear cut Plymouth Rock, ideal shape, good head, eye and legs, white all over; second, close up, fails in shape and unfinished tail, good eye and legs, fair comb; third, a grand white bird, weak in legs and beak, strong eye; fourth, good shape, not as well conditioned, strong eye, extra head points; fifth, somewhat smaller and not in full feather. A class of rare quality. First hen, a bird of highest quality with shape, color and condition combined; second, a beauty, clean cut and typical; third, fails just a mite on shape of back, fair legs, strong eye; fourth, similar to second, fails on comb and legs; fifth, a fine one, shown unfinished. First cockerel, a good Plymouth Rock all over, perfect condition, extra fine eye, good comb and legs, tail clean, well carried; second, another real beauty, fails on condition; third, grand shape, good comb, strong eye, back a trifle high and some narrow under; fourth, not at his best as yet but promises much, grand head and eye, weak legs; fifth, a white bird of fair shape, rather light in color of legs, fair comb, good eye. First pullet, one of the best we have ever handled, a beauty in type, good comb and eye, with perfect legs, snow white color, shown in best of condition, second, another extra fine one, fails in leg color, while clear in color, these are a shade lighter; third, a grand specimen in color, fails on shape of breast and back; fourth, a clean cut pullet, strong in shape, a trifle small; fifth, large and fine, unfinished in tail.

Buff Plymouth Rock: First cock a beautiful buff color, typical shape, a good handler; second, grand color, short legs, fair condition; third, a shade too light, excellent shape. First hen, a good even colored hen, fair comb, grand eye; second, another good buff, excepting tail color uneven; third, loses in shape of back. First cockerel, good in shape, extra color; second, equal to first excepting unfinished tail; third, a young bird and a trifle narrow under. First pullet, a clean, clear buff, free from shafting; second, very good, half a shade light; third, similar to second, but showing some shafting.

By Sharpe Butterfield, Windsor.

I hardly know how or what to say about our great Ontario Show. One thing is certain—that the exhibit was large and good enough for a building as large again. When the poultry building was built it was supposed to hold about two thousand exhibits, and now, in 1907, the entries were somewhere in the neighborhood of 4,250, crowded, with over double the amount of entries, and something should be done before next year. One would expect that from such overcrowding as we have had this year that it would have caused a great deal of confusion. Happily that did not take place to any appreciable extent, but the superintendent and his assistants must have had a very tedious task, for every nook and corner was filled, with even three tiers of coops in some parts of the building, trying to place twice the number of entries where half the number would be ample. Our Ontario exhibitors are trying hard to make this the Canadian century, and surely tho wheels of progress should not be stalled for want of more coops and a larger building. Think of just one part of this show—the Bantam Classes—which contained about 650 birds, just a good, large show of themselves, and

the quality of all exhibits deserves the building in accordance with their merits. The Ontario has grown to be the largest and best on the Continent, and the most successfully attended show I ever saw. Of the classes I judged I will endeavor to give to those who could not attend, a brief description of the competition.

Black Red Games: Were not out in their usual force. But the first four prizes went to very creditable birds.

Brown Reds: About the best and largest class I have ever met on this side of the Atlantic; first cock in nice show condition, and that had something to do with winning over the second. Second, if in equal condition should win over him, for he is a better colored bird. Third not as good in color as first and second. Hens, first a grand one in color, and if a little longer on leg, would be a sure winner almost anywhere. Second and third both good hens. First cockerel and first pullet very hopeful specimens; balance of class too immature to say positively how famous they may become.

Pyles: First cock quite a grand show bird; second, very long and straight on legs, but body shape is not very graceful. Hens, first, a grand, clean winner; second, except for too much coloring on wing and back, would bother even the first. Cockerels, first, a grand shapely bird, and with good care ought to round out for a great cock; second, another very good bird, not so shapely as first, but will improve with age. Pullets, a very nice class, and prizes fell to three good specimens.

Indian Games: Five cocks and not a middling one amongst them, and after first, second and third, I could have placed "Very Highly Commended." Hens, ten; first, grand in color and grand in body shape; second and third, close up to her; about six really good hens in this class Cockerels, nine; first not quite so shapely as second, but the absence of purple barring makes him a very valuable bird for the breeding yard; second, very shapely, but the purple was very much against him; third, not quite so shapely or short on leg, but about equal to second in purple barring. Balance of class very good. Pullets, eight; first, second and third very much alike in color, and lacing was grand; prizes fell pretty much on shapeliness. I think it would be a great improvement to use V. H. C., and H. C., where birds are deserving, though class may not contain more than four or five specimens.

I do not think Cornish Indian Game classes this year has ever been equalled at the Ontario for really good specimens.

There was a class for any other Standard variety Games, and it would be much better to have had read "Any other variety of Game," as pit Games are not Standard birds.

Black Red: 56 competitors, and competition keener than ever. In the cockerel class of 19 I could easily have acknowledged 12 out of the 19. This class was the best class I ever met, and any one of the 12 would grace and show with a first ribbon attached to his coop. Thirteen hens and nineteen pullets, and nearly every bird a top-notcher. Brown Reds, 27: a grand display, and some very meritorious birds amongst them. Duckwings, 29, and lots of good ones: a grand improvement, especially on females.

Pyles: We may call this the home of Pyle Bantams; 47 in number, and surely all the winners of extraordinary excellence. Notably strong were cocks and cockerels, and some changed hands at $30 to $50 a pound; while in hens and pullets competition was very strong. Whites, a great improvement; the improvement is so marked that few dare to engage in competition. Birchens, wonderful improvement, both in color and style.

Gold and Silver Sebrights, not room for a medium one to get a mention. Black Rose Combs was a wonderful class of good ones, especially so was first cock, first hen, first cockerel and first pullet, second and third prize birds following closely. White Rose Comb, much larger and better class than usual. The Cochin Bantam classes were heavy, and the Buffs and Blacks were par excellence. I had to leave several nice birds out of the prizes for tails having been tampered with. Whites hardly as strong as usual. Partridge Cochins were nothing like as heavy a class as last year, but in the winners about their only fault was larger in size than the other classes of Cochin Bantams. White Booted, a grand lot of birds. Japs, out in good force, and some very choice specimens got the awards. Polish Bearded and Unbearded, a decided improvement, especially so in good leg color.

Now for 632 Bantams, actual count, I have no doubt in my mind that this is the banner number ever shown at any annual show on this continent, a great show in themselves, and what they may lack in size as against the Asiatic family, they do not lack one iota in consequential dignity.

By L. G. Jarvis, Grimsby.

Polands, W. C. B.: First cock, grand crest, rich plumage, free from purple, good size; second, hardly as good as first in crest or tail shape; third, not as good in color, but has a grand crest. First hen, a good one, hard to beat in every section; second, not so large nor as rich in plumage. First cockerel, an easy winner, good color, with fine crest; second, not as good in color, about equal in shape; third, good crest but fails in color of plumage. First pullet, a grand one both in shape and color; beats second in color only. Golden: First cock a grand bird, wins easily, grand lacing, fine crest and the proper color; second, good bird, but fails in color. First hen, a grand one, good size and fair color; beats second in shape and color. First cock wins both in shape and color; the same can be said of the pullets. Golden bearded, all good; first cock, all Poland in shape, with good lacing, well formed crest; second, not as well laced. First hen, good crest and rich in plumage; second, about equal in crest, but lost to first in lacing on breast. First cockerel, beats second in both color and shape. First pullet, better in color. Silver: First cock wins on shape and condition over second. First hen, a grand one, and well shown, wins in color. First cockerel, wins in color over second; also first pullet. Buff Laced: Only two cocks; first, the lacing more distinct than second. First hen, a nice mellow Buff, fine lacing, in this point wins over second. First cockerel, a nice one, wins in color. First pullet, better buff than second.

R. C. W. Leghorns: A fine class; first cock, good shape, white plumage, with good comb; second, a good one, hardly as good in shape of comb or body. First hen, rather a neat one, fairly white, beats second in shape; second, better in color than third. First cockerel, a gem, pure white, with good comb, and in pink of condition; second, crowding hard, but hardly as nice in shape of tail or comb; third, also good, but fails a little in shape. First pullet, well shown, neat comb, and well up on legs, with well spread tail; second, very white, hardly as nice in comb; beats third in color.

Dorkings, White: Only fair. First cock wins in color over second. Same in hens. First cockerel only fair; wins over second easily. First

pullet, a very good one; second, poor. Colored Dorkings, a very good class. Will not make any special mention of same. Competition not close. Silver Dorkings, some grand birds, first cock, good color, great size, good shape, wins over second both in color and shape; second beats third in color. First hen, nice color, all Dorking in shape, wins in color over second, more particularly in breast color; second better in color and shape than third. First cockerel an extra good one, and in second had a good mate, only wins in tail and comb shape; third, not as good in color of body or hackle. First pullet, a large one, quite free from shafting, or "bricky" wing, in this particular wins over second; third, a very good one, but fails in breast shape and color.

Andalusians: A grand lot. First cock an extra good one, showing the proper color in all sections; second, a larger bird, but not as good in color, but better than third. First hen, neatly laced, and free from any mossiness in wings, good lobes; second, not as clear in color, shape good; third, a little dark in plumage. First cockerel, nice shape in most sections, good color, wins over second in color; third, not distinct enough in lacing. First pullet, fair in color, good shape, good lobes; second, not as good in color; third, too dark, good shape.

Houdans: The finest lot ever shown at this Exhibition. No doubt the twenty-five dollar cash special accounts for very large entry. First cock, good size, evenly mottled, good crest and beard, strong in bone, fourth and fifth toes well divided, a trifle better in color than second, and a little better in tail shape; third, not as distinct in mottling. First hen, an extra good one, well shown; beats second in color; third, hardly as nice in shape or as evenly mottled. First cockerel, a neat one, large, good crested beard, wins easily; second, not as good in shape but very distinct in mottling; third, a very good one, but loses in color. First and second pullet very close, first better in some sections in color; third, not as good in crest or beard.

Black Java: A few good one. Mottled, a small class, but good.

La Fleche: First cock, grand color, in this he wins over second. First hen, good color and nice shape; second, fails in color. First cockerel, good bird both in color and shape; second, hardly developed. First pullet wins in both color and shape.

Creve Coeurs: First cock, an extra good one, large, grand color, with well developed crest and beard; second, not quite as good in color. First hen, a big one, good in every section; second, not as good in crest or beard. First cockerel, wins in color over second. The same may be said in pullets.

Red Caps: A very strong class. First cock, a nice color, good comb; second, not as rich in color; third, lacks shape in two or three sections. First hen, a grand one, nice comb, good color, wins easily; second, very good, but in color loses to first; third, not as good in comb, shape or in color of plumage. First cockerel, a dandy, grand comb, rich plumage, all Red Cap in shape; second, also a nice one, but in color not up to first; third, also good, but could not take the second owing to color. First pullet, a beauty, grand comb, very fine plumage; second, a nice one, not as good in color; third, not as nice a comb as second, fair color.

Silkies: A nice class. The same may be said of Sultans.

A. O. Variety: Some very good birds; the Anconas probably took the largest share of the prizes.

JUDGED BY JAMES TUCKER, CONCORD, MICH.; REPORTED BY W. R. GRAHAM, GUELPH.

S. C. RHODE ISLAND REDS: We are very pleased to note that there was a very good display of Reds. It is a difficult matter to judge a class of Rhode Island Reds. I have watched several judges, talked with many breeders, and I must say that there is a lack of unformity as to what is the exact shade of color that is desirable. However, this must be expected in a new breed. There also appears to be in the minds of some a lack of shape. As I understand it, the shape of a Rhode Island Red is similar to the Black Java, that is to say, they are a long backed variety. They are not like a Plymouth Rock at all, being not as wide, but much longer in the back. The first prize cock bird was a fairly good shape. There was a difference in the shade of color between the hackle and saddle, which is not altogether desirable; but the appearance of his color, from the outside, was so very nice, especially the breast color. The second was somewhat off in color, but not nearly so good in shape, and the third was somewhat undersized, but of nice color. These awards, I think, were well placed. The first hen was very good shape, indeed, and was also of good size. Many would object to her hackle. This bird, has, what I would term, a laced hackle, that is to say, she has a black centre and laced on the outside with brown and golden. I cannot interpret the coloring of this hackle as being ticked. This bird was perhaps a trifle uneven in color for an ideal, but still, considering her shape, size and pretty fair color, she would not be a bad kind for a winner; in fact, I think, she wins well, even considering her defects. The second hen is another nice shaped one, but has quite a variety of colors, but at the same time she is a good one. Some judges might have placed her higher up. The third hen has pretty good color, but too small. The first cockerel was certainly of fine color, as far as I could see, from the outside of the coop. If he handles as well as he looks he is a right good one for color. To my mind, he lacks length of body and depth also, that is to say, he is deficient in shape. The second was a better shaped bird, but this bird had some ticking in his hackle. Some breeders consider this ticking desirable, and others consider it a defect. The third is probably the best shaped one of the three, had pretty good color, but might have had better ear lobes, a little too much white showing. The fourth had nice color, and is rather Wyandotty in type. The first pullet when I saw her was not in good condition. She appeared to be quite sick. She is certainly a good shaped pullet, and has nice color, but was not feeling at all well. The second appeared to have good color, and has good shape, and was close up to the first, considering condition. The third is a nice little young one, but not ready to show yet. The fourth was mature, very good shape and color, and has a laced hackle.

R. C. RHODE ISLAND REDS: The first cock has excellent shape, very fair color, and wins easily. The second is not so good in shape, has pretty fair color, but bad legs. The third has the best color of the three, from outside appearances, but is Wyandotte shaped. The first hen has fine shape, good size, but is a little mottled in color. The second is only fair in shape, and moderate in color. The same would apply to the third. The first cockerel has good color and good shape, and wins easily, and the second is not at all a bad one. These cockerels are good representatives of the breed. The third has nice outside color, but is a little Wyandotty in shape. The first pullet has a grand shape and color, but is a little bit off in head. Her head looks as if she had none too much constitution, but other than this, she is

a grand pullet. The second is immature yet, and, of course, is small. Some of these days she will be a grand one. The third and fourth were in one coop. They were nice colored birds, but a bit immature as yet.

By Wm. McNeil, London.

Light Brahmas: There were eleven cocks, all good ones; the first was a grand one, good head, comb and wattle, grand hackle, back a little short, grand tail, good leg and toe feathering, splendid color, and just right for showing; the second, a good one, not hardly so good in comb, fair hackle, a little longer in back than first, with a good tail, wanted about another week to be in good condition; third was close up to second. Balance of class all good ones, but hardly in fit condition for showing. Eleven hens, first was in pink of condition, splendid comb, good in head and ear lobes, grand hackle, good length of back, fine tail, good breast, good leg and toe feathers; second hen was a fine one with nice head and comb, a little darker in hackle than first, good length of back, but little off on color, a nicely laced tail, leg and toe feathers good; third was close up to second, in about two weeks she would give her a close run. I might say that there was only one poor hen in the whole class. Eleven cockerels; first, a beauty, with a grand head, comb and wattles, splendid hackle, with a grand back, a very fine tail, good leg and toe feathers; second will make a hard one to beat, tail was hardly full enough, and he was a little sappy, in about two weeks he will be fit to win anywhere; third, another good one, will make a grand old cock. Balance of class all good ones. Twelve pullets; first was a nice one, beautiful head, nice comb and wattles, with a grand neck and fine tail, splendid length of back; second, another good one, this is a pullet that will be heard from again, but wants about a month to be in shape for showing. She was a little sappy and her tail was hardly out, but she was extra good in color; third was another good one, but hardly as good in hackle or back as second; fourth was close up but lacked size. The Light Brahma class was the best I ever saw in Canada.

Dark Brahmas: Were a fair class: six cock birds; first was a good one, in nice condition, with a good head and comb, grand hackle, nice length of back with good tail, good breast, nice wing, good leg and toe feathering, good bird all through; second was another good one, hardly as good in comb, fair neck, good back, nice tail, with good saddle and good clear wing, not as good on breast as first, good leg and toe feathers; third, another fair bird, close up to second. Balance of class good birds. Eight hens; first a grand one, good steel grey all through, splendidly pencilled, but a little rusty on back; second and third, good ones, close up to first. Balance of class fair. Five Cockerels; first a nice one, an easy winner, good head and fair comb with nice hackle and back, and saddle, nice tail, good leg and toe feathers, second another nice bird, a fair comb and head, good hackle, nice back and saddle, good tail, nice leg and toe feathering; third, close up to second. Balance of class fair. Five pullets; first was a good one, with nice head and comb, grand hackle, with nice length of back, good steel grey, with beautiful pencilling all through, breast grand, about the best pencilling I have seen on a dark Brahma for a long time. Her only fault was she was a little narrow and coarse on hock, but otherwise, was a good one; second was very good, nice head and comb, fair hackle, good shape and back, but not as good in color as first. Balance of class fair.

Buff Cochins: Five cocks; first was a grand one, splendid head and comb, with a grand neck, nice colored back, good shape, with a beautiful

tail and extra fine shaped and colored breast, without a break from breast to toe feather. This bird was fit to win anywhere; second, close up, a little off on comb, hardly as good on front as first; third was a nice little one. Balance of class good. Eight hens; first a beauty, great size, and one shade all through, grand head and comb, just in the pink of condition for showing; second, another good one, but a little high in color, and a little down behind and only for that she would have run the first pretty close; third, another good one, but not as good in color as second; fourth he was a good big one, hardly as sound in color as third but a little down behind. Balance of class good. Five cockerels; first was the best shaped bird in the Cochin class, he had grand head and comb, splendid shaped neck and the same color from head to tail, grand back, good shaped tail, fine leg and toe feathers, and without a break in front; second, another good one, but not in such condition for showing, and not as well matured as first; third, another good one, close up to second. Balance of class good. Nine pullets: first was a grand one, fine head and comb, splendid shaped neck of grand color, with a good back and nice tail, grand leg and toe feathers, and nice color all over, this pullet was fitted up to perfection; second, another good one, with a fair head and comb, good neck, nice shaped back, but not so uniform in color as first, splendid leg and toe feathering; third, another good one, close up to second, but hardly fit for show. Balance of class good. I think this was the best class of Buff Cochins I have had the pleasure of seeing for a long time. The owners may well feel proud of this class.

Partridge Cochins: Six cocks; first was a good one, with a nice head and good comb, good hackle, nice short back, good saddle and carried a nice tail, with a nice breast, good leg and toe feathering and close to the ground; second, another good one, and close up to first; about the same would apply to the third. Balance of class fair. Six hens; first, hardly large enough, with nice head, and fair comb, grand pencilling and good coloring all over; second, a better size, but hardly as good in pencilling or color; third, close up. Six cockerels; first was very young and sappy, a little leggy, but good hackle and saddle color; second was better shaped but lacked on saddle and hackle, otherwise a nice bird; third ran second hard for honors. Balance of class fair. Nine pullets; first, a good one, but hardly big enough, good in shape, grand in color; second, a fair one; third, close up. Balance of class medium.

Black Cochins: No cocks. First hen but a fair one. Three cockerels, first was a good one, splendid shape, good color, all a Cochin. Four pullets, first was a nice one, good head and comb, nice shaped neck and back and of good color; second and third, both good ones.

White Cochins: Three cocks; first a grand big bird, splendid color, good shape; second and third both good ones. Five hens; first a nice one, splendid color, good shape, lots of leg and toe feather; second and third both good ones. Balance of class fair. Four cockerels; first a nice one, grand in color, splendid shape; second was a nice one, not so good in color. Balance of class close up. Four pullets; first an easy winner, grand color, splendid shape, lots of leg and toe feathers; second, another good one, hardly as good in color as first; third, a fair bird, a little better shape than second. Balance good.

Black Langshans: Five cocks; first, the right type, good high standing bird, with good comb and long neck, short back, with a high tail, a pair of good shoulders, grand in color, with fair leg and toe feathers; second, a little short on leg, too long on back, with good head and comb, tail

hardly long enough; third, another good bird, hardly as good in color as second. Balance of class good. Six hens; first, a good one, nice head and comb, good neck and back, nice length of tail, grand color, stood well up; second, another nice one, fair head and comb, good neck, fair back, not hardly as good in color as first, nice leg and toe feathers; third, a good one, close up to second. Five cockerels; first, a beauty, best bird in class, nice head and comb, good length of neck, nice short back, high tail, good length of leg, splendid color and fine type; second, another good one, but hardly high enough on leg, and a little long on back; third, another good bird, fair comb, nice neck, not short enough on back, grand in color. Balance of class good. Five pullets, a grand lot; first had a nice head but a spike out of comb, with a nice long neck, short and broad on back with a high tail, good length of leg, and fine breast; a great pity her comb was spoiled, as she is an extra good one; second, another nice one, good head and comb, good length of neck, but a little too long on back, grand tail, and splendid color; third, close up to second. Balance of section good. This was a grand class.

White Langshans: Four cocks; first, a big bird, white as snow, with a nice head and fair comb, but a little too blocky, too much Orpington type; second, a fair bird, good length of leg, but a little creamy; third, close up. Balance of class fair. Eight hens; first, nice hen with fair comb, nice neck, a little long in back, good tail, hardly high enough on leg; second, a fair hen, nice head, good comb, a little long on back; third, close up, bit off in color. Seven cockerels; first was a good one, nice head and comb, good neck, fair back, good tail, hardly high enough up; second, hardly as big as first; third, a nice bird but off in color. Balance, fair. Seven pullets; first, a fairly good one, nice comb, good length of neck, a little long on back, good tail, hardly deep enough on body; second and third, both fair. Balance of class fair. There is a lot of room to improve the White Langshans, as they are away behind the blacks. There were good ones, but they got spoiled in the washing. Only on that account some would have changed places.

G. S. Hamburgs: Three cocks; first was a good one, hard to beat, he had a grand comb, fair lobes, good hackle and saddle, with nice back, not hardly good enough on breast; second and third, both fair. Five hens; first, a good one in color, with fair comb, neck, good back and tail, nice breast; second, another good one, but hardly ripe; third, close up. Balance, fair. Three cockerels; all nice birds, but hardly fit. Three pullets; first, a nice one, good color, nice spangles, and in good condition; second and third, both good.

S. S. Hamburgs: Five cocks; first, comb a little coarse, fair lobes and wattles, with nice back, good saddle and hackle, fair tail, good breast; second, another fair bird, but hardly fit. Balance of class good. Not a poor cock in the lot. Six hens; first, a grand, big one, good comb and earlobes, a little dark about the head and hackle, with a grand back, good tail, nice breast; second, another good one, nice head and comb, fair neck, good back, tail and breast, hardly as big as first one; third, another good one, close up. Balance good. Five cockerels; first, a nice comb, splendid lobes, good spangled neck and back, nice clear tail, good on breast; second, a good one, fair comb, good lobes, with a better back and hackle, grand color and tail, if he had held it a little higher he would have been placed first. He will make a grand cock bird; third, another nice one, fair comb, good hackle, saddle and back, with a fair tail, close up to second. Balance of class, all good. Seven

pullets; first, a nice one, a little long on back but will make a grand hen with the right shaped spangle; second, another good one, grand in color; third, close up. If these three had not been shown there would still have been some worthy to win the prizes.

G. P. Hamburgs: Two cocks; both good ones, not much choice between them; first had a grand tail. One grand hen. Three cockerels; first a nice one, an easy winner; second, a nice one, third was too young, but good. Three pullets; first, a nice one, in pink of condition; second, another good one; third, was too young, but will be a grand hen, she is finely pencilled and grand in color.

S. P. Hamburgs: Three cocks; first, a nice one, nice head and comb, grand in color, with well laced sickles; second and third, both good ones. Three hens; first, a good one, nice comb and wattles, good neck, well and finely pencilled all over; second and third, a littler darker. Two cockerels; first, a beauty, grand comb and ear lobes, nice neck, good back and beautifully laced tail; second, another good one. Two grand pullets; first was best in pencilling.

Black Hamburgs: Three cocks; first was very stylish, with good comb and earlobes, grand tail, splendid shape; second, fair bird, not as good as first; third, a nice bird, but out of condition. Two hens, good enough to win anywhere. Two fine cockerels; first had good comb and earlobes, nice tail; second, nearly as good. Two nice pullets; good size, fine in color, both about the same. The Hamburg class was not a large one, but the quality was good, and it is a great pity that more fanciers do not breed Hamburgs. There are no better layers and they are a splendid table fowl. I have seen them killed and dressed and it would do you good to see a nice Hamburg fattened up for the table.

By W. R. Graham, Manager Poultry Department, Guelph.

Dressed Poultry: There was a larger display of dressed poultry this year than we have had in previous years. Not only was there an increase in the number shown, but also in the quality. I doubt very much whether we have seen as good birds at any previous Winter Fair as were shown this year.

There appears to be some misunderstanding by some breeders as to what kind of a chicken is wanted. I would like to draw attention in the commencement to the fact that we do not want to encourage the production of yellow, hard fleshed, cross-legged birds. What we want is a chicken with an abundance of soft white meat. By this we mean we want a bird with a long breast and the meat extending to the very tip of the breast bone. The flesh should be soft to the touch and a kid glove finish. There should be a good development of fattened flesh on the back, but the birds should not be overdone, *i.e.*, they should not be so fat as to be patchy. We like to see chickens with smooth legs, and as said before, the flesh must be white. The color of the flesh of the chickens exhibited this year was not as good as we have seen in some previous years. Taking up the classes in general I would say that the display of Brahmas was better than usual. They are particularly better in the lack of prominence of the breast bone. The softness of the flesh and the well-covered breast bones was very evident in the winners. The Cochins were of nice color in flesh, was fairly soft, but they lacked width of body and covering of the breast bone. In the display of Langshans, the first prize pair were of the white variety, were fair color,

very nicely dressed and the flesh was soft and evenly distributed. This pair won quite easily. The second and third prize pairs were of the black variety, and were not so well fleshed, nor yet were they so well dressed, although, in this particular they were not so very far behind. There was very keen competition in the display of Plymouth Rock cockerels. We had to throw out one of the best birds for having white legs. This seemed to be rather a debatable point in the minds of some of the exhibitors. Our prize list does not offer prizes for cross-breeds, and we must apply some of the disqualifying clauses for live poultry. For example, white legged Plymouth Rocks, Rose Comb Plymouth Rocks, Single Comb Wyandottes, and White legged Leghorns, etc., cannot be considered in competition, because they must be cross-bred chickens, or at least, if shown in the live poultry class would be disqualified. The majority of the prizes for Rock cockerels were won by one exhibitor. These birds excelled the others in the extreme development of flesh upon the breasts and the width of body.

There were some beautiful white skinned chickens shown by another exhibitor, which were not quite fat enough and one serious objection to them was in the lack of width of body and too much depth of breast bone, which made the birds appear unattractive. Had these birds been wider in body and less in depth, their superior color might have helped them much to have won. What is said of the Plymouth Rock cockerels equally applies to the pullets. The second prize pair of pullets lacked width of body, winning largely on color and softness of flesh.

In the Wyandotte class we had two or three good pairs of chickens shown and the rest were very ordinary. I cannot understand exactly why we did not get a good display of good Wyandottes. The Wyandotte breeders claim that they have the ideal chicken, but never yet have they put up an exhibit anyway near that put up by some of the other breeders.

The first prize pair of Wyandotte cockerels this year were extremely good, the breast bone being long and extra well covered with soft white meat. They were certainly an ideal pair of chickens and won the sweepstakes for the best pair of chickens of any breed in the Show. Outside of one other pair, the appearance of the display of Wyandottes did not amount to much.

In Orpingtons, we had some good chickens. The Orpingtons as usually shown are very prominent in their breast bones. They have always appeared to me to be somewhat rough and coarse as a market chicken and a lack of meat covering of the breast bone. None of these objections would apply to the first prize pair of cockerels. These were not deep breasted chickens, but were only moderately deep and extremely well covered with meat. I have never seen before Orpington chickens so well fleshed as were these, and I am almost tempted to say that I expect never to see another pair. They, to my mind, were a freak, because there was nothing else in their class that would compare with them. As far as I could tell they appeared to be pure-bred, and I should think that the feeder must have selected from an enormous number of birds to find two birds with such excellent development of breast meat. There were a lot of good birds shown in the Orpington class and the distinction between the winners and those that did not win was largely in the softness of the flesh and in the covering of the breast bones, also in the neatness in dressing.

There was only a fair show of Dorkings. In Black Minorcas the quality was much better than usual and the first prize pair were certainly good chickens.

There was a large class of Leghorns shown. There were some shown in this class that looked like Plymouth Rocks for size, but they had large combs

and large white ear lobes, and I presume were pure-bred Leghorns, but I have never before seen Leghorns the size of these birds. The birds in this class had fairly hard flesh.

The class of Games was fairly good, better than we have had before, but there is still plenty of room for improvement. They were not as fat as they should be.

The display of ducks was larger than usual, but not up to the mark in quality. For some unknown reason the majority of the ducks exhibited this year were as yellow as gold. The awards were placed on the birds that had the greatest development of meat and the least development of the extreme yellow color. As in previous years a pair of Black Cayuga ducks won the sweepstakes. This has happened several times.

The display of geese was good. The winning pairs were very white and nicely dressed. There were larger geese in the Show than these, but they were not nearly so well dressed and were too yellow. If some more exhibitors can get their geese white, there will be an interesting competition among the geese.

The display of turkeys was fairly good, particularly the prize pair of young Toms.

OFFICERS AND COMMITTEES FOR ONTARIO PROVINCIAL WINTER FAIR, 1908.

Honorary President.....Arthur Johnston, Greenwood.
President.....Lt.-Col. R. McEwen, Byron.
Vice-President.....John Bright, Myrtle.
Secretary-Treasurer.....A. P. Westervelt, Toronto.

Executive Committee.—Lt.-Col. R. McEwen, Byron; John Bright, Myrtle; Wm. McNeil, London; W. W. Ballantyne, Stratford; Wm. Jones, Zenda; A. P. Westervelt, Toronto.

Committee on Cattle.—John Bright, Myrtle; A. W. Smith, Maple Lodge; Arthur Johnston, Greenwood; Robert Miller, Stouffville; John M. Tyson, Guelph; W. W. Ballantyne, Stratford; James Bowman, Guelph.

Committee on Sheep. John Jackson, Abingdon; James Tolton, Walkerton; A. W. Smith; Robert Miller; James Millar, Guelph; Lt.-Col. R. McEwen.

Committee on Swine.—Wm. Jones; Prof. G. E. Day, Guelph; G. B. Hood, Guelph; R. H. Harding, Thorndale; J. E. Brethour, Burford; John Barber, Guelph.

Dairy Committee.—W. W. Ballantyne; Prof. H. H. Dean, Guelph; R. S. Stevenson, Ancastor; John McKee, Norwich.

Poultry Committee.—Wm. McNeil; A. W. Tyson, Guelph; L. H. Baldwin, Deer Park; F. A. Woodward, Toronto; W. R. Graham, Guelph; R. Oke, London; J. H. Saunders, London.

Judging Competition Committee.—Prof. G. E. Day; A. W. Smith; J. E. Brethour; John Jackson; W. W. Ballantyne; R. Miller; R. W. Wade, O. A. C., Guelph.

Seed Committee.—G. A. Putnam, Toronto; Prof. C. A. Zavitz, Guelph; L. H. Newman, Ottawa; John Barber; G. B. Hood.

Reception Committee.—J. P. Downey, M.P.P., Guelph; Hon. Nelson Monteith, Toronto; Hon. John Dryden, Toronto; Dr. J. G. Rutherford, Ottawa; Arthur Johnston; A. W. Smith; President G. C. Creelman, Guelph; Mayor Newstead, Guelph; A. F. H. Jones, Guelph; A. W. Tyson; J. M. Duff, Guelph; Lt.-Col. R. McEwen; H. Guthrie, M.P., Guelph; J. M. Struthers, Guelph and Chairman Reception Committee, Guelph.

Superintendent of Buildings.—D. G. Hanmer, Burford.

Assistant Superintendent.—J. H. Saunders, London.

FINANCIAL STATEMENT OF THE PROVINCIAL WINTER FAIR.

Receipts.

Legislative Grant	$6,539.00
Prince of Wales Prize	50.00
Gate Receipts	2,002.60
Advertising in Prize List	465.00
Canadian Seed Growers' Association, prizes	180.00
Dominion Shorthorn Association, special prizes	315.00
Canadian Ayrshire Association, special prizes	20.00
Canadian Ayrshire Association, through Dominion Cattle Association prize	45.00
Holstein Friesian Association of Canada, special prizes	25.00
Holstein Friesian Ass'n. of Canada, through Dominion Cattle Ass'n., prizes	80.00
Canadian Hereford Ass'n., through Dominion Cattle Ass'n., prizes	14.00
Dominion Swine Association, grant	200.00
Ontario Yorkshire Society, grant	100.00
Milk sold from Dairy	134.45
Dressed poultry sold	127.65
Sale of carcasses	897.86
Birds sold in selling class	104.00
Sale of seed exhibits	64.35
Fees	3,073.27
Special cash poultry prizes	560.02
Sale of catalogues	17.57
Prize money refunded	12.00
Cheque not cashed	.50
	$15,027.27

Expenditures.

Balance due Treasurer as per last Report	$504.66
Directors' Expenses	249.81
Postage and Stationery	282.21
Printing and advertising	1,176.51
Office help, including expenses at Show	595.65
Telegraph, telephone, interest and express	115.94
Judges, judges' clerks and ring committees	558.85
Lecturers and public meetings	316.95
Reporting meetings	75.00
City of Guelph, annual payment re Fair Building	260.00
Lighting building	167.18
Heating building	58.38
Milk sold	134.45
Dressed Poultry sold	127.75
Carcasses sold	898.43
Birds sold, sale class	104.00
Seed grain sold	63.70
Prizes paid	8,467.00
General help, including Superintendent and Assistants	721.76
Block test expenses	112.33
Alterations and repairs	147.63
Feed, straw and shavings	202.70
Refunds of entry fees	33.75
Freight on cattle exhibits, Toronto Junction	34.00
Judging competition	12.50
Auditor	15.00
Miscellaneous	28.15
	$15,464.29

Balance due Treasurer, January 31st, 1908... $437.02

Examined and found correct, this 17th day of March, 1908.

(Signed) J. M. Duff,
Auditor.

(Signed) Arthur Johnston,
President.

(Signed) A. P. Westervelt,
Treasurer.

EASTERN ONTARIO LIVE STOCK AND POULTRY SHOW, 1908.

The Show for 1908 was held at Ottawa, on January 20th to 24th. On Tuesday evening a public meeting was held in the Howick Pavilion, at which the following addresses were given. Dr. James Mills acted as Chairman.

ADDRESS OF WELCOME.

By Mayor D'Arcy Scott, Ottawa.

On behalf of the City of Ottawa, it gives me great pleasure to welcome The Fat Stock Show Association, and The Poultry Association, again to Ottawa. Last year I had the privilege of welcoming these Associations on the occasion of their annual Show, and on the way home somebody told me I had made a good speech, and I was naturally pleased at that. And this year when I was asked to say a few words and remembered I had made a good speech last year, I thought I would make the same speech again, but the difficulty is, that I have forgotten it. However, I remembered one thing about it, and perhaps that was the one feature that made it attractive, and that is, that it was very short.

I made a mistake last year in not attending the lectures that were given, because if I had I would be more qualified to say something really learned about fat stock or poultry. I might, perhaps, have been able to have said something about how the hen could be made to lay two eggs in twenty-four hours, or how to ventilate a stable; and I must try to attend the lectures this year, because of course, I am going to be Mayor next year, and I promise you that I will be qualified at that time. I remember once speaking at a dairy meeting, and they told me that I made a good hit because I said I did not own a cow, but if I did, I would belong to a cow-testing association. I did not know what that was, but I heard someone talking about it, and I thought it was all right.

Seriously, it is a great privilege to Ottawa to have this Annual Show in our midst, and I can assure you that it is fully appreciated, because without proper cattle and poultry, and dairy products, where would we be in a city like Ottawa? We are absolutely dependent for our chief nutrition on the products of the dairy and the farm, and therefore, we are very glad to know that these things are so flourishing, because it, no doubt, means a great benefit to the community.

The City of Ottawa has not been altogether dormant in improving dairy products. We realized a year ago, that perhaps an improvement could be made in the milk supply in this city, and some of the farmers and dairymen who were supplying the milk thought that we might have minded our own business, but I did not think so. We employed a skilled Veterinary Surgeon, a Government man, who went out and examined all the cow stables, and he reported on them, and on his report we found it wise to appoint a permanent officer, who would go about among the dairymen who supply milk to the City of Ottawa, and give them the benefit of his skill, just in the same

way that the gentlemen who are going to lecture to you will give you the benefit of their skill. Everybody must believe that the City of Ottawa is materially benefited by this appointment, and we are getting a better quality of milk than we ever did before.

There is one other improvement which I would like the City of Ottawa to take up, which may be of some interest to this industry in the production of fat stock, and that is, I think the City of Ottawa, sooner or later, and I hope it will be as soon as possible, should establish a Municipal abattoir and cattle-yard. To-day, we have a by-law which prohibits the killing of cattle within the limits of the city. There is no recognized abattoir for this city, or any place in the county around Ottawa, and while a farmer can kill on his own farm for his own purpose, yet a city butcher cannot kill in the City of Ottawa. I would like to get some place, not too far from the city, in the township of Nepean, near the Grand Trunk or Canadian Pacific Railroad, get a farm of fifty or one hundred acres, and establish there a Municipal abattoir and cattle-yard. I mention Nepean, because Gloucester does not like us any more because we closed up the rendering plant. Some regulation could be made whereby no meat could be offered for sale on the market unless it had been killed at this abattoir or inspected by a competent official.

I promised at the beginning that I would not speak very long, and again welcoming you to Ottawa, I thank you for your kind attention.

REPLY TO ADDRESS OF WELCOME.

By Dr. James Mills, Ottawa.

Although I am not associated with the farming community as I was some years ago, I may say that I have not lost my interest in that part of the population of this Dominion. I spent a great deal of time very intimately associated with the farmers of Ontario, and to some extent, with the farmers of other provinces of the Dominion, and I think I am safe in saying, that, taking the farming community as you find it, in all parts of the country, we may say that for intellectual power and moral stability, the farming section of the community would compare favorably with any other section. My reason for saying that is this: learned professions have been very largely recruited from the farming community, and men prominent in all lines of professional life in this country have come very largely from the farming community, and the strongest and best men we have are very often from that source; and, therefore, I think I am safe in saying that in an intellectual power, such as can be developed on the farm, we have the highest type of intellectuality that is to be found in the country. And we can say, in the matter of moral stability, the farming community can compare with any other class of people in the country. During the time I was travelling from one point to another in this Province of Ontario, I noticed at once, in the different classes of the farming community, generally speaking, they are the most intelligent and progressive class of farmers who are fruit growers and stock raisers, and I think you will find that to be generally true.

I may say to the Mayor, in reply to his address of welcome, that these farmers present, whether poultry men, live-stock men, or whatever they may be, appreciate his words of welcome. I think, if there is anything that is

needed more than another in this eastern part of the province, it is the bringing of the citizens of Ottawa and the farmers in this part of the country more closely together, so that they shall be more interested, the one with the other. I would like to see a gathering of this kind occupy the greater part of that large hall out there. The last time I was at Amherst, Nova Scotia, a hall holding two thousand people was filled to the last chair in the rear, and I understand the hall is now scarcely sufficient for the ladies and gentlemen who gather there from about fifteen to thirty miles around, to listen to the addresses. The question for the Directors of this Show and for the people of the City of Ottawa is to consider how they can best rouse the farmers of the eastern part of the province to come together here, and make this Show something like what they have in Guelph. You have an admirable building. I am surprised to see such a fine hall. There is nothing to compare to it in Guelph, and you want to arouse the farmers of this eastern part, and get them to believe there is something worth coming for, and get your halls filled up, and stir up the enthusiasm of the people, and if you get the citizens here, it will extend to the farmers. I understand you have an excellent Poultry Show. In reply to the Mayor, I wish to say that the farmers appreciate a hearty reception as no other class of people do.

We are very glad to have with us here to-night, Lieut.-Colonel Matheson, the able, intelligent and progressive Treasurer of Ontario. He is interested especially with the eastern part of the Province. He was at the Fat Stock Show in Guelph not long since, and we will be glad to hear him this evening, and if he can do anything to help this eastern part of the province, especially the farmers, including the dairymen, poultry men and stockmen, and stir up their interest in this Show, he will do good work for the country.

ADDRESS.

By Geo. C. Creelman, President Ontario Agricultural College, Guelph.

It gives me the greatest possible pleasure to-night to bring you greetings from the Ontario Agricultural College at Guelph. You have heard Lieut.-Colonel Matheson say something about the institution with which it is my pleasure to be connected. At the present time, we have over eight hundred students, and from them I bring you greetings. I want to say that boys and girls from the Provinces of Ontario, Saskatchewan, Alberta, British Columbia, Nova Scotia, and from Newfoundland; from the United States, from Mexico and Brazil, from the Argentine Republic, and from South Africa, India, and Japan; from all these countries we have students in attendance. They come to the Ontario Agricultural College to learn Ontario farming methods, that they may go back to these various countries I have mentioned and give their people some of the good things that are practised here by the people of Ontario.

We have one hundred and twenty-five girls, one hundred and twelve of whom are in residence, learning simple home duties that their mothers had to learn by hard experience, the simple home duties of cooking and sewing, and the weekly washing. It does not seem very much to send your girl away from home for. It does not seem that it is worth while to take a girl away from home sixteen, seventeen, or eighteen years of age, to learn to do these simple things. Her mother is a good cook, and has done the washing week after week, and it does not seem right to send her away to

learn to do these things, and yet I do not know of one girl who has come to the McDonald Institute, and who has taken up systematically these three homely things that she must practise every week of her life, but has not said that sh did learn to do the work more systematically. She has learned to save steps, has learned to use simple and improved machinery, and has learned to make the very most of the good things that she finds upon the farm. She has been able to use milk and butter and flour and eggs and other products of the farm, in ways that she did not appreciate before. She goes back home, and is willing to hang up her hat in the hall, and go back into the kitchen, and help her mother to do the things of every-day life. Therefore, I believe there is room for an institution of this kind.

Of the seven hundred boys in attendance at the present time, most of them come from the Province of Ontario, but we have a few from most of the countries in the world. We have three hundred green men who never went to college before, and most of them have never been anywhere except in the country schools. Some of them have their sons with them, and one has got his grandson with him; three generations studying, learning from one another, asking questions, staying at the college for two weeks, and taking the short course. I did not come all the way down here to talk about the Agricultural College. I have been all over this country in professional capacity, as Superintendent of the Farmers' Institutes, and then as President of the College, and I have been able to see something that I have been able to compare with other things. I have travelled with Senator Derbyshire pretty nearly all over Eastern Ontario. I have met him at Dairy Conventions and Farmers' Institutes, and you cannot rub up against a man like that, and have him rub you up against everybody else, without observing something which will benefit you.

I want to tell you some things I have seen. The text I wish to use, is in these words,—"The individual, in farming, is after all, the all-important factor,"—and I want to follow that up by saying this, that hardly a week or month passes but that some man from the country or from the city will walk into my office, after looking at the sheep and cattle, hogs and horses, and will say, "You have a fine lot of stuff up here;" and we are very proud of it, but he rarely goes out of the office without stopping to say, "I could do the same thing if I had the Government at the back of me." I want to say right here, that is a lie. You have in this Show, a lot of cattle, and in the first row you have a number bred by James Leask, of South Ontario. He has no Government at his back, yet that same James Leask, without any Government at his back, bred and fed an animal which he took over to the great Live Stock Show at Chicago, and there, in competition with the cattle of the States of the Union and of the Provinces of the Dominion, won first prize and the trophy, and carried off the world's honors.

I want to say that it is always foolishness to say that because our stock looks well, or Mr. Grisdale's stock looks well, or Senator Edward's stock looks well, that your stock cannot be got to look as well. It takes just as much brain in the management and breeding of stock, as it does in any other business in the world, and the Government cannot help one bit in it.

It was my privilege last week, at the Western Dairymen's Association, in the town of Woodstock, in the absence of Mr. A. F. MacLaren, to present a silver medal to a young man in Western Ontario, who sent milk to the factory and who got the largest amount of milk from his cows during the season of 1907. And will you believe me, if I say that that young man came forward with the records taken at the factory, by the Instructor and Inspector, and he could hardly say "Thank you," he was so little-used to appearing in public. Yet, his herd produced an average of 8,000 pounds each,

—the average cow in Ontario produces about 3,000 pounds,—and this man had graded his cows, and he was only thirty years of age, and he did it without the assistance of the Government or anyone else, by his own intelligence. We have got good cows in Ontario. If you could have gone with Lieut.-Colonel Matheson through the States he went through, you would have come back believing that we have got some of the best cattle in the world, and that the cattle of the Province of Ontario are pretty good cattle, if they only had the chance. What we want, is that the man behind the cow shall take just a little more personal and scientific interest in his business.

The second point that I want to make is, that we want no bigger farms but better farms. I would like to see every farmer growing the regular four year rotation, plowing under clover to increase the fertility of his soil. The farmer to-day, who is selling his hay, or the farmer who is selling anything that the other fellow is going to take and turn into the beast and make money out of it, is a very foolish farmer indeed. I believe that we can let the West pretty well raise our grain for making flour. I believe it is a good thing that at one time we produced in Ontario, thirty-two million bushels of wheat in the year, and that we are now only producing about twenty million bushels. I believe it is a good thing, and why? Because we are raising twice as many oats, and three times as much barley, and they are being fed to our young stock, and are being turned off in the shape of butter, milk, cheese, poultry and bacon, and these products are being taken directly from the farmer to the consumer, and more fertilizing matter is left on the farm, and the farmer is better off.

I am not harping to-night. I am not complaining. The farmers of the Province of Ontario have doubled their out-put in the last ten years, without an appreciable increase in population or acreage, and that is a good showing, and yet, we can get twice as much out of our farms as we are getting at the present time.

The third point is not more varieties of crops, but a better knowledge of the ones we have. We have been sending out from the Agricultural College; and Dr. Saunders has been sending out from the Experimental Farm, different kinds of wheat, oats, barley, roots and forage crops, which will yield twice as much as the average crops that are planted on our farms, and I say it is high time that we were looking to the other side of the question, and see if we cannot get hold of some of these seeds. It seems lamentable that, although in business life, in banking and manufacturing if you go in and tell them how they can double their money without any appreciable expense, they will pay you a good deal for that information, or if you can do it for them they will take you into their employ, and pay you a large salary, and yet, it has been one of the hardest things we have had to do, after we have become absolutely sure by years of experience; after we have become just as sure as we are sure of anything, that certain varieties of seeds give a much better yield, we cannot get the farmers to plant that sort of seed and get the advantage of it on their own farms.

The fourth point I wish to make is,—not better implements, but a better care of them, and a better knowledge of how to fix them when they get out of order. We have established recently at the Agricultural College, a Department for the manipulation of farm machinery, and you would be surprised to find how many mechanics are being developed among the boys. They are not allowed to do much with the machinery at home, and therefore were not interested in the work, but we have them take the machines apart and put them together. They take a mower or a binder apart or take a plow all to pieces and then put it together again, and they find out a lot of things

about the machinery that they never knew before. Formerly, the agent sold them the machine, and told them how to use it, and they would go ahead and use it, and when they ran up against something wrong, they sent for the agent. I believe it would be worth the farmers' while to take an old machine or even a new one and go over it, and it would save the boy a lot of trouble and heart-burnings when he takes charge of a farm of his own.

Another point. Not bigger barns and stables but barns and stables better arranged and better ventilated. I think that is a good point. Although our barns may not be falling down, many of them are not put together too well, and when you go into them sometimes in the morning, the odor is so strong that you want to draw back, and you wonder how the cattle live in that sort of an atmosphere. I believe we are getting our barns too warm. We prepare for the extreme cold days. I believe, it would be better to let them get a little chilly than to keep them in poorly ventilated stables. I am not advocating keeping our cows in cold stables, but they should have plenty of fresh air. The time has come when we cannot any longer afford to house those good animals in poor barns. The dairy business is making the land in Eastern Ontario rise in value. You cannot buy any farm for twice the price you could have got them for before the dairying came in to the County of Leeds. How are we going to do all these things? A meeting here and there arouses a little excitement, gets the people talking, but that will not do. I think the dairymen have done very well in getting the instructors to go around in the way they do. My opinion is, it would be money well spent if we had one man in every county, who had been properly educated to the job, and would be in a position to be at the beck and call of the farmers in the county, to go out and help them in their difficulties just when the difficulties occur. I believe, if we had a few young men who knew the farm practices before they went to the College to do this work, it would be a good thing for the farming community. I say, send the boys of the farm to the Agricultural College, and let them get a scientific knowledge of the job, with the farm knowledge they have got at home, and then put one of these young men in a town, and let him open an office, as has been done in Perth, Morrisburg, Lindsay, Essex, Galt, and Collingwood. We want less spasmodic teaching, and more teaching every day of the week, and then these sixteen-year-old girls will be driven clean out of the schools. There will not be room for them, because the young men will be asking for better education, and they will attend the Agricultural High Schools. We are now teaching one per cent. of the eligible agricultural sons, between the ages of sixteen and twenty-five years, and the other ninety-nine per cent. are going without it. But that young man who took the silver medal at Woodstock, has only been testing his own cows for about one year, and he brought his average up to eight thousand pounds per cow. We had one cow at the College last year, and we weighed every pound of her milk and she gave twenty thousand, seven hundred and seventy-eight pounds in one year. You see the difference between the average of the Province of Ontario (three thousand pounds) and that cow. Could any other business in the world stand that sort of thing? There are great possibilities for the farmers of the Province of Ontario. If every man would make up his mind that he was going to have a cow of that kind, and bring her out to this Show, we would have a very big Show here next year.

The farmer must be better educated for the work, because *first*,—One-quarter of the cows in Eastern Ontario are not producing; one-quarter are actually not paying for their feed. And *second*,—The average yield of our staple crops, grasses and forage crops and roots is less than one-third of

the maximum. The average farmer is not getting more than one-third of the crop that the best farmers are getting. *Third*,—Our soils in many parts of the country are being worn out because there has not been proper rotation or because they are not conserving the energy and are selling the very life out of the farm. *Fourth*,—Patent stock foods at big prices are a mistake when practically the same ingredients might be mixed on the farm. *Fifth*,—Small seed and broken seed in the seed sown upon the average farm reduces the crop one-half. *Sixth*,—Every stone pile, every stump and every wet spot reduces the acreage, but not the labor.

LECTURES ON PRACTICAL SUBJECTS DELIVERED AT THE EASTERN ONTARIO LIVE STOCK AND POULTRY SHOW, 1908.

Hon. Mr. Monteith, Minister of Agriculture for Ontario, occupied the chair at the meeting devoted to subjects relating to dairying, and opened the meeting with the following remarks:

The display in some portions of the show is not what I would look for. Evidently, the public interest in this portion of the province is not evidenced in the show we have in the building. However, we have a number of animals, which illustrate the high-class beef animal, which might well be examined and studied, by those having the beef production in mind. Conditions seem to be moving towards dairying in the eastern portions of the province, and we hope that next year dairying will be more emphasized in your exhibits at this show. The exhibit in the swine department is well up to the expectation of the officers of the Department. It exemplifies the large interest it represents in this portion of the province. The production of cattle, sheep, and swine, and poultry is of great importance, and their great importance is, apparently, not recognized by the consuming public. The price of agricultural products is rapidly increasing, and this, apparently, is something that is not considered, to any great extent, by the wage earners in the industrial centres. They do not appreciate, to the full extent, what this means. The purchasing power of a dollar is decreasing, therefore, the wage of a worker must, necessarily, increase to keep pace. There are a great many interests radiating out from this advance in food products. In the first place, we, as agriculturists, must recognize that there is going to be, from time to time, a great difference in the price between the good and the poor products that we have for sale, therefore, it behooves us, as far as possible, to try to produce nothing but the best, and, by doing that, we will induce consumption, and increase our markets to that extent. I noticed recently in an article on the economic side of this great question, that, as gold was the standard of value, and the increased amount of gold put into circulation in the world, during the last century, is 2,500 per cent., and it would follow, naturally, that food products, to keep pace with it, would have to increase 2,500 per cent., but they have not increased to that extent. Therefore, gold to-day will buy less of food products than it would at the beginning of the last century, so that there is an economic relation between capital and the products of foods, and it is for us, having in our charge such a vast heritage as we have in this Province of Ontario, representing the value of one billion, one hundred and eighty million of dollars, it is important that we, having this great trust, should see to it that we make it return a large production for our labor, and the capital invested. Our beef interests, during the last ten years, have mounted up from twelve million to some twenty-

nine million dollars, in the Province of Ontario. Our hog and bacon interests have increased from some ten million to twenty-two million dollars. These figures are tremendous, and they show the vastly increasing revenues coming into the hands of our farmers. Our dairy products have increased from about ten millions to between seventeen and eighteen million dollars, a larger income to-day than ten years ago in these several lines I have mentioned.

The farmer to-day is called upon to be a better business man in many ways. He is handling a larger amount of money, and he will need to have more knowledge to handle it properly. The Department, over which I have charge, is endeavoring to carry to the farmers, through mediums such as the Agricultural Societies and Farmers' Institutes, Dairymen's Associations, and through the Dairy instructors and inspectors, the practices which have stood the test and experience of years, and it is highly important that men and women should come to these public gatherings, and learn as much as they can, and carry it back and put it into practice on their farms. While much work can be done through the Department from Toronto, the great responsibility rests upon the individual. For this reason, we are glad to welcome you here to-night.

THE BREEDING AND CARE OF THE DAIRY COW FROM BIRTH TO MATURITY.

By W. F. Stephen, Huntingdon, Que.

The Chairman has truly said that the meeting this morning is an important one, and I think I can emphasize that statement. I have just one regret, and that is that there is not a larger number of our dairymen present to discuss this question. It is not a new question, but one that is interesting to the dairy community of Canada and also the United States. A few years ago we were told that the average yearly production of milk per cow in Canada was about three thousand pounds and the average production of butter fat about one-hundred and fifteen to one hundred and twenty-five pounds, and we find when we go over to New York State or the State of Illinois the average production is a little higher. I have been informed that the average production of cows in New York State is four thousand pounds per annum. It is probable that we are making progress along these lines here in Canada, but I question whether we are, notwithstanding all that has been said regarding the breeding and feeding of our dairy herds. When we go across to the old lands, in Denmark, for instance, the average production is from six to seven thousand pounds; in Sweden, six to seven thousand pounds; in Holland, over seven thousand. In Great Britain, private records only have been kept, but we find there that the average production is over six thousand pounds, and if that is the case, there is something wrong with our system of breeding or feeding dairy cows. If our system is at fault, and I believe it is, let us get down and find out just where it lies. Our Chairman has referred to this industry, truly, as the greatest industry of our country, and yet, when we boil it all down to the average per cow, it does not seem as if our industry is on a paying basis. There are many herds whose production reaches seven thousand pounds of milk, and there are many cows that produce ten thousand pounds. Yes, many of them up to fifteen thousand pounds yearly. Now,

gentlemen, taking that for granted, why is it that our herds are not producing a higher average of milk and butter fat than they are to-day? To my mind there are two reasons. The first is, that our farmers and dairymen have not given the breeding of our dairy cows the consideration that they should, and the second is, that they have been simply running the business in a haphazard way. Breeding from anything and everything, and breeding from scrub sires because they are cheap. Mixing up the breeds instead of breeding along proper lines is the worst thing we can do. When we go to these herds whose milk records are high, we find they are either pure-bred, or they are herds that have been graded up by the use of pure-bred sires. The milk qualities of these pure-bred animals have been perpetuated from one generation to another with the result that they are profitable herds. The greatest mistake our dairymen have made has been breeding promiscuously, mixing up the breeds, breeding from anything. Occasionally we find one who has had a fairly good herd of Shorthorns, Holsteins, or Ayrshire grades, and he has been using a pure-bred Holstein bull, and not being just suited with that he puts an Ayrshire bull in that herd, and then some one tells him that he should have a Jersey, and then he introduces a Jersey bull, and what has he got? He has nothing but a mongrel, and while he may get some individual animals that will do fairly well he has on the whole a small producing herd.

A few years ago, in the town of Huntingdon, where I live, they held a Dairymen's Convention, and a gentleman, rather peculiar in appearance, was one of the speakers, and we got into a dispute as to what nationality he belonged to, we questioned him and he said, "I will tell you. I was up in a German settlement a few days ago, and that same question was asked me, and I told them one of my grandmothers was Scotch, another Irish, another English and another Dutch, and I said, "What do you call that?" "Mein Gott," one German said, " I would call that hash." And that is what you have when you have a whole lot of breeds mixed. You get the weakness of the breeds brought out instead of the strength. I strongly advise you to select your breed, and then select the very best type of that breed, and on no account mix the breeds. Can you improve a Holstein that has been bred for nearly two thousand years along certain lines, or can you improve the Channel Island breeds that have also been bred for generations, or the Ayrshire, by mixing them up? I don't think you can.

Another mistake the farmers are making is breeding from young sires. The average farmer breeds from a young sire because, in the first place he is cheap; in the second place, he is not as difficult to handle as an older sire may be, and then when the season is over he gets rid of him. This applies particularly to the scrub sires. I am glad to say that there is to-day a greater desire among dairymen and others to breed from pure sires and also to breed from older sires. We cannot place too much value on the sire. A young sire does not give us as strong and vigorous stock as an older sire. Those of you who have been in the breeding business for years will agree with me that you can get better stock of greater vitality and more vigorous constitution from aged sires than you can from younger sires. Aged sires very often have little or no value placed upon them except for beef, especially among dairy breeds. I know three dairy sires that have been kept in the community in which I reside until they were nine, ten and eleven years of age, and they were of great value to the dairy farmers of that community because they laid the foundation to the dairy stock, which I believe is hardly excelled in any community. I do not wish to say this boastingly, but it emphasizes the fact that we are too hasty to get rid of our old sires.

There is possibly another point in connection with our breeding operations that we lose sight of. Dairymen do not take into consideration some of the laws of breeding. There are four laws of breeding which it is not so very difficult to understand. First, the law of heredity, that like begets like; second, the law of variation, varying from that; third, the law of environment, which has a bearing on our breeding operation, and also the law of atavism or breeding back. By that first law of heredity, we know that if we breed a Holstein to a Holstein we will get a Holstein. If you breed animals of the same type you get animals of the same type. There is a law which varies from that, the law of variat'on, which breeds animals of a different type, and we sometimes harmonize these types and make as it were a third type. Then again, there is that law of environment over which we have control. Over the law of heredity we have not very much control, but over the law of variation we have some control.

How our animals are cared for from their infancy up is important. Sometimes we find after breeding along certain lines for a number of years that we get a calf that is altogether different, it has bred back to some ancestor, and it is wise for the dairy farmers to take this into consideration. The law of variation enabled him to get something that will be better than the best. I was giving an address some time ago before the American Ayrshire Association in the city of Philadelphia, and I said we wanted to commence with the calf as soon as it is born, and an old breeder who had had wonderful success in breeding cows of great productive capacity, said, "Yes, you want to commence three months before they are born," and there was some truth in what the old sage said. What are we after in our breeding operations? We are after the production of milk and butter fat, and there is something else; constitutional vigor is another thing that must be maintained in our dairy cows, and one thing we have to contend for, is to keep the constitutional vigor from depreciating. There is a tendency to go down and depreciate, and in selecting our sires and our females we must select animals of strong, vigorous constitution, which are noted by strong nostrils, a good sized head, broad forehead, large lung capacity, good heart action, strong loin and large barrel. The vitality and vigor of our herds is very important. Without vigor of constitution, strong vitality and nervous energy we cannot breed animals that will be good producers, I care not what breed we select. How are we to maintain that vitality? We must commence with the calf. Many of our dairymen pay little attention to the cow when pregnant. Too frequently they do not give the cow sufficient nourishment for her own maintenance, let alone the nourishment for the unborn calf. If we do not feed that cow a proper ration she will go down in flesh and she is not able to produce a calf of strong vitality; she may possibly produce a weakling. I know many dairymen that put their cows when they are dry on a ration of straw, and the result is, they go down in flesh. At this time we should feed the cow a good ration in order that she can maintain her constitutional vigor and then we may look for a strong and vigorous calf.

There is another point right here. We frequently hear it advocated that we cannot make dairying profitable unless we milk our cows to within six weeks of calving. In my own experience and in the experience of my neighbors, and this is as far as I can go, I find that if we prolong the milking period to within six or four weeks of the period of freshening that there is a possibility that the calf will not be as vigorous and as strong as if the cow had been dried off eight or ten weeks. There is a tendency to make a

double drain upon the cow; very often a cow from a great producing family will not produce as good a producer as herself, and to my mind that has something to do with it.

Now for the young calf. As soon as it is born what have we got? The *baby cow*. We have an animal that may possibly develop into a great producer. It may have inherited great producing qualities from both the sire and the dam, and it is in the dairyman's hands to develop that baby cow so that it may become a great producer; but too often we find that the *baby cow* has not had the consideration to which it is entitled, and it is spoiled. In the first place possibly it has not had the right feed. To my mind, the calf (with the exception possibly of the Jersey) should have its mother's milk for at least two weeks, then the whole milk may decrease gradually until at the end of three weeks or possibly four weeks you are giving them skim milk. Milk is the natural food of the calf, and if we allow it to suckle or feed on whole milk for a period of two months we begin to develop in that calf a flesh forming and beef forming characteristic, and it may take some months to undo that. On the other hand if we feed a ration of skim milk, a ration which is rich in protein, she will develop bone, muscle and sinew. Along with the skim milk I like to use linseed meal. Where you are troubled with scours it is from feeding the baby calf something which is too strong for its digestive organs. It is best not to over-feed it. I like along with the skim milk to add a preparation composed of one part pure linseed meal and three parts of flour. Commence when the calf is three weeks old, when you commence to take off the whole milk, give it one tablespoonful of that. First mix it with cold water and then pour on the boiling water and allow it to simmer two or three minutes and feed it in the milk. It has a tendency to keep the digestive organs in good condition. I have had very few cases of scours since I began to use that preparation, and those of my neighbors who have tried it have found it to be beneficial and very satisfactory. The question comes up sometimes, how can we raise our calves without milk? This applies especially to those who are supplying milk to the city trade or those who are producing milk for the cheese factories. There are those who could raise calves after four weeks, and very successfully, on some of the calf foods on the market, without milk or even on oil cake, but we must not overlook the fact that milk is the natural food of the calf. I like to give them skim milk for at least six months. There is a tendency to spoil the calf for life if you don't give it proper food. Go over the country during the summer season and you will find at least fifty per cent. of the calves of dairy cows that have been spoiled simply because they have not received the food which their stomachs were able to digest, and the result is stunted calves, and a stunted calf will never recover, and that is why we have so many calves in our country that lack vitality and constitutional vigor, and therefore, they are not profitable when they come to be cows. It would be better if half the calves were sent to the butcher and more care given to the other half. Many forget that the calf is the *baby cow* and must be cared for accordingly. If we go to the Old Land where they have made such a success of dairying, and where they have high producing cows, you will find they care for their young stock as well as for the old. In Holland the young stock is cared for almost as well as a member of the household. The dairyman has to exercise a great deal of judgment in breeding dairy stock. It is a mistake to breed them too young. I am interested in this great dairy industry; it deserves encouragement, and it is an industry which will add to the prosperity of our country.

THE CHAIRMAN: If there is anything that you would like to ask Mr. Stephen, I am sure he will be pleased to give you all the information he possibly can.

Q.—In feeding the dairy calf what rule have you to go by; some calves will take more than others. How can you tell when you are over-feeding them?

A.—The breeder has to use his judgment in these matters. There is individuality in every animal the same as there is in every person, while some calves will take two gallons of milk or two and a half gallons per day, others may not take over a gallon and a half; the breeder must use his judgment, and if he is paying attention to his business he will soon discover whether his calf is thriving or not.

Q.—Do you think it a good plan to feed the dairy calf three times a day for the first month?

A.—That is not a bad plan, but the trouble is, there are very many dairymen who have not the time at their disposal, and they have either got to milk the cow three times a day, or heat the milk.

Q.—We tried the last two years and the results have been very good.

A.—It is practised in some parts in the old land. About three quarts in the morning and evening, and one quart at noon, that will raise a calf very well for the first month unless it is a large calf. Give the calf a little at a time, do not gorge them whatever you do.

Q.—Is there any strength in whey for calves?

A.—Yes, whey has a food value, but the great trouble with whey that you get from the cheese factory is that it is too strong in acid, and it has an injurious effect on the digestive organs of the animal.

Q.—You say if you feed a calf on whole milk they are apt to go to beef?

A.—Yes, if fed for any length of time you encourage that tendency.

Q.—Does it injure the dairy qualities of our heifers to allow them to become fleshy at two years of age?

A.—As a rule we find in our dairy breds that if a heifer is very fleshy at two years of age, she does not do as well the first lactation period, but improves on the second.

Q.—How do you cure the scours?

A.—In the first place, reduce the feed. Provided you are feeding the calf skim milk, cut off skim milk altogether, and substitute whole milk. If it is Jersey milk add some water to it, and even with Ayrshire and Holstein milk add a little water, and you will bring it around in that way about as quick as any. If it should be a serious case a teaspoonful of laudanum will set it right.

FEEDING DAIRY CATTLE.

By J. H. GRISDALE, AGRICULTURIST, CENTRAL EXPERIMENTAL FARM, OTTAWA.

There is no subject which is of more importance than that of dairy cattle. Ours is becoming essentially a milk-producing country, and if there is one thing more important than another, it is that we should know how to feed our dairy cattle properly. Without any further preliminary remarks, let me say a few words about what I think are the characteristics of good feeding of dairy cattle; what points need to be emphasized, and what points should receive most careful attention by the feeder.

In the first place we want to remember that if we are going to get from our cattle adequate returns, we must give them all the feed they will consume profitably at all times. That is one point where a great many of our farmers and feeders fall short. They neglect to give the cattle sufficient feed. They are apt to think that if they can get them through the winter, it is all right as long as they keep them alive, whereas their aim should be to persuade them to consume as much food as possible. Of course, there is a limit to certain kinds of food. We do not want them to eat as much grain as possible, but we must get them filled up. If there is one thing that insures good digestion and the comfort of the animal more than another, it is getting the animal filled up.

Now it is not advisable or economical to use expensive foods in the filling up process, and here is where the art of feeding comes in, to persuade the cattle to consume as much rough cheap food as will put them in a comfortable condition. Here is where the farmer who is paying attention to his business makes good. Cattle like succulent feed. If, therefore, there is one quality in feed which is more important than another, it is that it should be juicy and palatable. It makes them eat larger quantities. In summer there is no trouble in getting them to eat grass, that fills them up. In order to fill them up cheaply in winter, we must have succulency. That quality can be imparted to the feed in various ways. Probably the cheapest succulent food in this district is corn ensilage. But where silage and roots are lacking it is possible to cut the straw and sprinkle a little salt and water on it; this will make it appetizing. Another method of rendering feed palatable where only straw can be fed for roughage is to sprinkle some meal thereon. A very small amount of it will impart flavor to the feed. They are then likely to eat enough to fill themselves up.

After the farmer has persuaded his cattle to eat a sufficient quantity of food, the next thing is to give to it the quality necessary for the object he has in view. If it is merely to winter the cattle, then a large amount of rich food is not necessary, but if it is for the production of milk, he must consider the quantity of milk he expects the cow to produce. A very safe ration is made up of the feeds we have on our Canadian farms, oats, peas, barley and bran in equal parts. That usually makes up a cheap ration.

Last year and the year before we tried a number of experiments, comparing different meal rations, and we found none of them that would surpass the preparation I have mentioned for economy in production of milk. Of course, we must in the case of some cows, especially new milk cows, try to urge them on to do a little better than they are doing, and a little extra meal is a good thing. Give them more than they really deserve. The amount they deserve will depend upon the value you put upon the meal, and the price you can get for the milk. Probably the safest rule is about one pound of meal to four pounds of milk. Of course, if you want to make a record, you may have to give them more. There is a great deal in the individuality of the animal. Some cows will do as much with one pound of meal to four pounds of milk as others will with one pound of meal to three pounds of milk, and again there is something in the quality of the meal. Where you are giving bran and oil meal, or bran and gluten, or bran, oil meal and barley, we must modify the quantity of our meal ration to suit the object we have in view. Some cows like bran better than others. Some cows take kindly to any change of ration, while others do not. Generally speaking the more good dairy breed blood a cow has, the better she is as a producer. In nearly every case we find that a cow who is ready to eat anything and everything is a good producer. You will have

to guide yourself by the animal you are feeding. The preparation of the feed is a matter of convenience, but imparting succulency to the ration is essential if you are going to persuade your animals to take a great deal of this rough cheap feed. We have found that mixing straw along with the ensilage or roots is the best method. It is advisable not to mix the meal with the roughage, but to put it on top of the roughage after it has been fed cattle, they are then bound to eat the whole thing. The object is to give it to them so that they may eat it along with the roughage, and in that way it will be assured of a much more thorough digestion. If it is given by itself, it is apt to be carried through the first stomach by the water which we think should always be before the animals; thus a certain amount of the meal would be wasted from lack of proper intermixing of the digestive juices which are found in such quantities in the first stomach.

Time is a matter of importance, and I think much time is wasted in feeding. Many think the more frequently they can persuade them to eat, the better it is, but I am directly of the opposite opinion. We make a practise at the Experimental Farm of feeding only twice a day. We don't do that merely because we want to save labor, but also because we have found from experience, and by repeated experiments, that feeding twice a day gives just as good returns as feeding three or four times. There is no advantage as as far as I can see in feeding more than twice a day. Of course, you must understand what is meant by feeding twice a day. The first thing after milking in the morning, we give ensilage, roots and straw, and on top of that, meal; after that portion of the ration is consumed, we give them some long hay. This is repeated in the afternoon. They thus may lie all through the middle of the day digesting the morning's feed, just as they lie all through the night digesting the feed given them in the afternoon. We tried feeding the cows three times a day, and we found that they ate very little, if any more (some of them not as much), and we got no better returns either in beef or milk.

The quantity of salt to feed seems to be very debatable. We like to give them all the salt they will eat. I don't advise giving them salt on the feed, although I find a great many feeders who recommend strongly, giving them from an ounce to two ounces a day, mixed in the feed. Of course, it probably adds to the palatability, but from my own experience I don't see that there is anything in it. Have water always before them.

It is generally supposed that roots are infinitely superior to ensilage. We have been experimenting along this line, comparing the value of these things, ton for ton, and do not find that roots are at all superior to ensilage. This may be due to the fact that roots per ton, do not contain as much digestible dry matter as ensilage, but the mixing of the two, gives better results than either separately. By this plan we can persuade the animals to eat more coarse dry matter than we could were we to give them all roots or all ensilage; it also adds to the palatability, because roots are more appetizing than ensilage We have found that oat straw can be fed very advantageously, provided it is mixed with roots and ensilage. Where it is fed dry, it is pretty near a matter of forcing them to eat it, and therefore there is loss. Where a cow eats food because she has to eat it to keep herself comfortable and filled up, then look out for poor results. You must feed your dairy cows in such a way that they eat it because they like it, and because they feel as though they would like to have a little more of that, and then you will get the best returns.

Of all roughage, clover hay is the best, except alfalfa, which I think is the very best. Growing alfalfa is largely a matter, not of local conditions, but of your own treatment, and I do not think there is a dairyman

in Eastern Ontario who cannot grow alfalfa if he is careful to give the soil the right preparation, and then give the crop the right attention. We can all grow red clover, and with plenty of good clover to feed the dairy cows you can get along fine. We have produced red clover on the Experimental Farm for about $2.00 a ton. It must of course, be well made, and if there is one part of it better than another, it is the second crop which will give you better returns for pounds consumed than any other food I know of, except possibly meal. I think one hundred pounds of second growth clover just as good as one hundred pounds of bran; in fact if I had to take my choice, I would prefer red clover.

I want to say a word or two about the most valuable meals. The common feeds, oats, barley, peas, and bran, are just about as cheap and valuable, but owing to the conditions this year when oats and bran are so expensive, it may be advisable to introduce some other feeds, and in the case of very heavy milking cows where it is necessary to give them a heavy meal ration, oil meal and gluten ought to be fed. Oil meal is certainly a good ration for a heavy milking cow, because it contains a very large proportion of the element which is so essential to the production of milk protein. Gluten is a feed that is not very commonly known, probably for the reason that it is often adulterated. Some gluten meals show as low as 18 per cent. of protein, while other samples may show as high as 35 per cent., so that you can see that while gluten meal is a first-class food, it must be bought with discretion. Gluten is an exceedingly palatable food for dairy cattle. We have fed it for a number of years, and we find it gives uniformly good results. Cotton seed meal is of great merit as a milk producer. Last year in an experiment we compared cotton seed meal, gluten meal, oil meal, and common grains. We found cotton seed meal and oil meal raised the cost of production, although we managed to keep our cows up to a higher flow of milk.

Q.—Can you increase butter fat by the ration you feed?

A.—No, you can vary it, but you cannot definitely increase it.

JUDGING DAIRY CATTLE.

By D. Drummond, Department of Agriculture, Ottawa.

I do not know why I have been picked out to address you on judging dairy cattle. The question of judging live stock is a very difficult proposition, no matter how you take it. Judges will tell you that dairy cattle are the worst of all to judge, and the most difficult. On asking a poultry judge which hens will lay the most eggs, he cannot tell you, and I think it is out of the question to ask a dairy judge to tell you which cows give the most milk. So much depends on how she is fed. He is to judge from the type, and conformation. There is no better way of estimating the merits of a dairy cow when giving milk than by weigh scales, and the Babcock test, having consideration for duration of the flow, period of pregnancy and the food consumed, and this question of food consumed should be carefully looked into, because the cow has to pay for not only the food consumed during the time she is giving milk, but during the whole year.

In judging a dairy cow you look for something that is likely to produce stock of merit, and to do so for a considerable number of years, and there is where the judge of a dairy cow is up against a difficult proposition. The score card is practically useless in judging a dairy cow. I have had to learn

in the school of experience, and when you come to learn how to judge a dairy cow by experience, going into the public market, and putting your money into the cow, then if you don't get it out again, you will have practical experience.

There are five ways in which I look at the dairy cow. There are four systems in the dairy cow; the nervous system, the digestive system, the circulatory system, and the milk-secretion system. And the fifth point we have to look at is quality, and that is a very indefinite thing, but still it means a good deal, and I think the question of quality very largely covers the question of economy of production. I think a judge of dairy cows should have been first an exhibitor, or he should have paid a great deal of attention to dairy cows at shows, because there are a great many tricks, and unless a judge knows them himself he is not in a position to watch them. I don't blame the exhibitor for making use of them, because I think an exhibitor at any of our shows is perfectly justified to use any legitimate means to make his animal look its best, but pumping milk into the udder as they did at Toronto, I do not think is legitimate.

In judging I like to watch the animals coming into the ring. There is a good deal about the way the animal walks. It tells you of her vigor and constitution. I like to see her walk into the ring nice and sprightly. When you have got them in a row, you will notice that most of the judges go around behind them. The udder of the cow is important, but there is something else. She must have some sort of a constitution and nervous system, and good digestive organs, or she will not have a good udder. The udder is an indication of what that animal is able to do, and therefore most judges go around behind the dairy cow first, and judge her from the standpoint of the udder, and then they come around to the head, and the head has a lot to do with the giving of milk, and judge the cut of it. Here we have a good indication of the nervous system. The head of a cow should be very clean cut, and should not carry any surplus flesh. The face veins should be very distinct, standing out on the face from the eye to the nose like cords. That tells you that cow has a good nervous system, and that goes to the production of milk rather than the laying on of flesh.

I believe the four systems in a cow have got to go together. You don't want any of them abnormally developed at the expense of others, because if so, you will not have a cow that is going to be a good producer for a large number of years. You should examine the udder closely to see that it has not got a defective quarter. A cow with a defective quarter should never get a prize in a ring. She should be entirely put out. She may give as much milk, but from a breeder's standpoint a defective quarter is very apt to be hereditary, and therefore her heifers, or even the heifers of a bull from her, will have a tendency towards a defective quarter. We want the udder to extend as well forward as behind, if possible.

You should then look at the constitution, and there is where you are apt to get left, unless there is sufficient room in the chest cavity for heart and lungs. We don't ask to have that right at the top. We don't want what is called a heavy top such as you find on a beef animal, but we look for depth lower down, about the centre of the body, and from there down to what is known as the front flank. We want that part of the animal well filled out so that it tells you that inside there is a large chest cavity fit to hold the heart and lungs, and that they are working well.

Prof. Dean: Defining defective quarter, would you say that a cow should not receive a prize if one quarter was a little smaller than another; would you put a cow out for that?

A.—In a close class, always. We have no way of judging whether it happened by accident or otherwise.

Q.—I am talking about one that is not quite as well developed as another?

A.—These are more often hereditary than blind ones. A great many of you will know that a heifer with her first calf may not have that defective quarter that her dam had, but as years go by, that quarter gradually gets a little defective, and I consider a defective quarter a very serious thing from the breeder's standpoint, but not from the producer's standpoint, because you can get plenty of cows that give as much milk from three teats as others do from four. This year I came across three heifers that had only three quarters when they came to market.

I think Mr. Grisdale struck the key-note in our dairy business, and that is "feeding our dairy cows." We must without exception have cows that have sufficient capacity to consume a large quantity of food. The dairy cow has got to consume, I think, at least one-third more than the beef steer, therefore she must have a larger stomach cacacity, and we want to pay good attention to that, and see that it is well developed. See that she has a fairly well-sprung rib of good length with a strong abdomen, not a pot-bellied one, because a pot-bellied cow has a weak abdomen, which is generally followed by weak digestion. You will notice in some that right along the side at the end of the ribs they have a sort of furrow that looks as if it was breaking away from the support of the ribs. These are not really profitable producers. I have found that the best producers we have are cows that have got what we call good handling quality. They have got a soft pliable skin, oily in its feel, with soft hair. The skin is not too thick nor too thin, but about medium, and I think you will find that a cow of that sort of handling qualities will be the most economical producer of milk. She will assimilate her food better, and make better use of it, and give you better results in the pail for the food consumed.

SELECTION OF A STALLION AND PROPER TYPE IN MATING.

By John Gardhouse, Highfield.

The address on the above subject was also delivered at the Winter Fair, Guelph, and is printed on page 83. The following discussion on the address took place at the Eastern Show.

Q.—What breed of heavy horses would you recommend?

A.—We are often asked that question, and I am not here to advocate any breed. A good horse is a good horse no matter what breed he belongs to, and a bad horse is a bad horse I don't care what breed he belongs to. If you have got Clydesdale mares breed them to Clydesdale stallions. If you have Shire mares breed them to Shire stallions. If you have Percheron mares breed them to Percheron stallions. If you have Thoroughbreds or Cleveland Bays or Hackneys breed them to the breed to which they belong. One of the greatest mistakes that the farmers in Ontario are making to-day is that they have no set type before them, and the probabilities are that if some decent fellow comes along with a horse of one breed, you will breed to that horse, and perhaps just as good a fellow will come along with another breed of horse the next year, and he will induce you to breed to that type.

Q.—What is the difference between a Clydesdale and a Shire?

A.—There is very little difference between the good ones of either breed. You know as well as I know that years ago, they were practically one breed, and the only difference between them at the present time is the difference they have made in the breeding of them in England and Scotland. At the present time I believe that the Shire horse is a little heavier-bodied horse and does not carry quite as much quality as the Clyde. I am not here to tell you the Clyde horse is the best horse. The horse is the best that is the best individual, no matter whether it carries a Shire pedigree or a Clyde pedigree. There is no doubt we have more Clyde horses in this country than we have of the other breeds. I would advise you to take up whatever breed suits you best. You are more likely to get good results in that way. I think a Thoroughbred should be used if a farmer wants to breed light horses.

Q.—I rather object to a horse that has not something of a shoulder to hold the collar. You say it does not make any difference?

A.—I said you need not be afraid of there being no resting place for the collar.

Q.—Yes, but he might have a sore shoulder?

A.—I said you should have a horse with a fairly thick neck with a good covering of muscle so that if he should get thin in condition, you will have muscle there, and he is not so apt to get sore-shouldered as if you had flat shoulders that you cannot cover with flesh.

Q.—Which would you prefer, an open-ribbed horse or one well-ribbed up?

A.—One well-ribbed up, all the muscle on the back that you can possibly get.

Q.—Don't you think as Canadians we should have Canadian bred horses?

A.—Yes, I believe the Province of Ontario should be the breeding-ground for the Dominion of Canada in live-stock of all kinds, but we must have good foundation stock, and until we get the Ontario men better educated, we cannot breed enough Canadian bred horses of fit and proper type to be used as stallions in this country.

Q.—Then the sooner we get to working at that the better?

A.—Exactly, that is the very point we want to take up at this meeting. We want to get our farmers better educated in that line.

Q.—Would you advise crossing light horses with heavy draft horses?

A.—No, not too light.

Q.—My mare is about eleven hundred?

A.—That is pretty light to breed to a heavy horse.

Q.—What would you breed a light horse to?

A.—I would not breed a great many of them at all. If you are breeding light horses follow along in that line. If you have a Hackney breed her to a Hackney, a Thoroughbred to a Thoroughbred, and wherever there is a weakness in the mare be sure that the horse is fairly good in that point.

Q.—You would not overlook a weakness in the stallion?

A.—No, not at all.

MILK, AND THE SANITARY HANDLING OF MILK AND MILK PRODUCTS.

By H. H. Dean, Professor of Dairy Husbandry, O.A.C., Guelph.

My subject has been assigned to me, else I am sure I should not have selected that topic. In Eastern Ontario you are more interested in the cheese business than you are in what may be called "sanitary milk," and if I were to select a topic which would be popular I should probably have selected the "inspection of cheese factories and the paying for cheese at the car door." I shall only say by way of preface that I am in full sympathy with that movement and I have often wondered why the farmers and factory-men of Eastern Ontario have put up with the system which has been followed these many years. I have wondered why men who are above the average in intelligence in the dairy work have put up with a system which is certainly behind the times.

There is one thing that is the basis of all dairy work, and that is, "clean milk." The expression "clean milk" is the slogan of the hour. Without clean milk it is impossible to make fine cheese or fine butter, and certainly impossible to supply the much needed article in the households of the people of this country. Clean milk, then, is what we must have in all lines of dairy work. Sometime, years ago, I read an article where the Egyptologists, that is, men who are delving in the ancient ruins and history of Egypt, had made the discovery of a monument of a cow that was made two thousand years before Christ. The monument represented a boy sucking a cow, and a full grown man standing in front of the cow, and her head resting upon his shoulder, and the man who made the discovery said that in all probability this historical monument represents the idea of the Egyptians two thousand years before Christ in their relation to the dairy cow—that she nourished man when a boy and protected him after he had grown up. And we have in this marvellous illustration, the fact that history repeats itself. The history of Egypt will be the history of Canada. The history of the individual is the history of the nation. The individual starts as a weakling, he rises higher and higher, and by and by he gets to the pinnacle of fame; then he begins to go down, and before he passes away he is probably nothing more than a babbling idiot. Such is the history of man, such is the history of the nation. The dairy cow, evidently, two thousand years before Christ, was a wonderful factor in the development of the great country Egypt, and in the relation of the dairy cow in Egypt there is the relation of the dairy cow to the Canadians to-day. Where would the average man be if it were not for the dairy cow? What would become of the children were it not for the dairy cow? Is it not a fact that nine-tenths of the children raised to-day have to depend on the cow's milk, and where would the rest of the Canadians be if they could not get a pure and wholesome milk supply? I hold, Mr. Chairman, that this is one of the most important questions which could be discussed in connection with agriculture in this country, because the very life of the people depends on a pure and wholesome milk supply. Strong, stalwart men, beautiful and graceful women depend upon it for the getting of a proper start in life. One speaker this morning emphasised that fact; he said that in reference to the cows we must start early in life if we are going to raise a successful dairy cow, and what is true of the cow is doubly true of the human individual. Unless he gets a fair start in life, unless he gets a pure and wholesome milk supply, what will be the future of that person? A miserable existence, and undoubtedly to-day men and women who are

suffering from ill-health have had a start of that kind in early life. It means in many cases that they did not have a pure and wholesome milk supply.

Now, I shall not deal with the question of feeding cows, or taking care of cows, or sanitary stables of anything of that nature, but I propose to strike off on some new line, and if you will permit me, I shall follow my notes rather closely in order that I may say exactly what I wish to say. I heard the Secretary of the Provincial Board of Health say at a meeting last spring, that he considered Ottawa had the best milk supply of any city in Canada, and he ought to know. I was pleased to hear the Mayor of Ottawa say that as a result of the campaign that has been instituted here there has been a marked improvement in the milk supply of this city. You have also a well-conducted dairy company, which I shall touch upon before I get through. All these things make it doubly interesting for a person to come and talk about this question of clean milk.

Now there are some phases in connection with this milk question which are not altogether pleasing to deal with; there are some truths that we have to face, some truths that are more or less unpleasant, but I think it is the duty of a man in a public position to face these truths manfully and let the truth be known whatever the result may be. Now it will be impossible to frame any regulation which will be entirely satisfactory, keep your eye on the best thing you can see and do the best you can. I have a very good story to illustrate this:—A boy had a hen that was not laying very big eggs, and he was not pleased with the eggs he was g tting, so he got an ostrich egg and put it in the nest, first he wrote on it, "Keep your eye on this and do the best you can." The men who are getting the best results from their cows to-day are the men who understand the cows and who know what the cow wants.

What is milk? Milk is a secretion, or product of the action of certain glands, known as the mammary glands, of the female. Various animals secrete milk in larger or smaller quantities, but the animal's milk mostly used in Canada is that of the cow. The cow has responded more largely to man's efforts at improvement in the quantity and quality of milk secreted than has any other animal. When we consider that a cow has been known to give in one year a weight of milk equal to from ten to twenty times her body weight, we marvel at her wonderful powers. "The milch cow transmutes the pasturage and forage of the farm into edible protein, lactose and fat—into units of nutriment for man—at less than one-half the cost of similar units in beef produced by a steer." (Pearson). We thus see that the cow not only secretes or makes large quantities of milk for human food, but she does this economically—more economically, according to the authority just quoted, than does the steer. The same authority says, "Milk is not only the most economical, but when pure and undefiled it is among the most wholesome and most easily digested of all foods of animal origin. These are the strongest possible reasons for its extended use."

While the foregoing is true, it is also true as he says, that, "There is no food under ordinary conditions which is so exposed to contamination, that is so easily contaminated, or that so fosters contamination as milk. Hence the necessity for the study of milk hygiene." Jenson says there is nothing in the theory that goat's milk is free from disease germs, and that it is not less liable to contamination than is cow's milk.

Following the excellent lead given us by European countries, more particularly Denmark, and in recent years our neighbor to the south of us, we in Canada are beginning to realize the importance of sanitary milk and of the study of "Milk Hygiene."

Up to the present we have concerned ourselves more with a study of the adulterations of milk in the form of watering and skimming. These are but minor offences. The allowing of dirt to get into milk used for human food is a much worse offence than the addition of water or the removal of cream. To contaminate milk, knowingly or unknowingly, with disease germs is criminal. Ignorance of the law in an ordinary court of justice is not recognized as an excuse for the offence. Ignorance of the principles of milk hygiene is no excuse for the person committing the offence. A few examples will illustrate how ignorance of milk hygiene may be very harmful.

A milk producer or dealer puts boracic acid, salicylic acid, formalin, soda, etc., in milk without knowing that they are harmful. Is such a person to be excused on the ground of ignorance ? We think not. Let us see what are some of the results from using these so-called preservatives in milk. In this we shall follow largely the views of Jenson as set forth in his work "Milk Hygiene" and translated by Pearson. "Boric acid may cause illness, vomiting and diarrhoea and if given for a prolonged time may injure the kidneys and cause loss in weight." "Salicylic acid has the effect of checking digestion—particularly for children it should be considered injurious; on this account its use should be prohibited."

"Formalin or formol is a 40% solution in water of formaldehyde" (gas). "Formaldehyde is a powerful poison for animal cells and tissues. Investigations have proven that the addition of formalin to milk, even in the proportion of 1 to 50,000, may be injurious, especially for young animals and even to the point of causing death. The addition of formalin to milk should therefore be rigorously prohibited." Alkalies, such as baking soda, "hide changes and conceal the fact that the milk is perhaps already spoiled."

The Transmitting of Disease.

Another class of milk contamination even more serious than the foregoing needs emphasizing, viz., the danger of transmitting disease from animals to man through consuming milk from diseased cows. We shall not take time to consider the more dangerous diseases which may be transmitted and which we discussed recently before a similar audience, but will mention some common troubles that cow owners usually consider quite harmless. In this connection we shall quote again largely from Jenson's "Milk Hygiene."

Cow-pox. This is considered to be a harmless disease by the owners of cows. Were it not for the trouble and discomfort of milking cows afflicted with this disease the average man would consider it" not worth making a fuss about."

On this point Jenson observes: "Among the examples of this disease (cow-pox) in children, which have occurred through the use of milk from infected cows and which are to be taken as unmistakable transmission of the disease, the following observation by Stern may be given—a large number of children that had used milk from this herd (having cow-pox) became affected with an eruption on the face, which healed, leaving scars."

Inflammation of the udder. This is a common trouble among cows. There are various forms and causes of the disease, which veterinarians find it difficult to separate. Jenson says, "The various forms of mastitis (inflammation of the udder) are of microbic origin." He instances several cases of catarrh of the stomach and intestines in children caused by drinking infected milk a few hours before being attacked.

His conclusions are: "Since causes of udder inflammation in which the secretion contains bacteria harmful to man cannot be differentiated by clinical means from the less dangerous, *the milk of every cow afflicted with mastitis should be regarded as injurious to health.* This applies not alone to the altered secretion, but also to the apparently normal milk from the parts of the udder not affected."

"Calf cholera" is also regarded as a dangerous disease in a stable, especially where "nursery" or children's milk is produced.

The foregoing facts are not cited with the desire to "scare" anyone or to injure the dairy business, but with the object of calling attention very forcibly to the dangers which lie in the careless, unsanitary handling of milk and milk products. Milk and milk products are not alone in this respect. Similar dangers lie in all our foods. We cannot escape them if we would. The wise thing is to reduce the danger of infection as far as possible. For ordinary milk we believe that pasteurization is the most effective treatment. Better than pasteurization, undoubtedly, is the production of milk in such a hygienic manner that contamination is practically impossible, but until we reach this stage, we had better rely on pasteurization. It will be necessary, however, to see that the work is properly carried out and in such a manner as to render any milk, which might be infected perfectly harmless. Where continuous or momentary heating is followed a temperature of 176°F. will be necessary for the best results, although a temperature of 160 to 165°F. will produce very good results and destroy most of the harmful germs. Rapid cooling to 50°F. must follow.

There is a tendency to pooh, pooh any agitation which has for its object the prevention of disease. History repeats itself, and we, as a young country, should be willing to learn lessons from the experience of older dairy countries. We cannot do better than follow that great dairy leader, Denmark. They found, for example, that tuberculosis was spreading at an alarming rate among their people.

The leaders in agricultural and medical science of Denmark decided upon an agressive campaign of prevention. The chief means adopted was pasteurization, and as a result of this they find the "White Man's Plague" decreasing at a rate which is most gratifying. Why should we not learn lessons from this aggressive, scientific dairy nation? The trouble in Canada is that every man considers "he is just as good as any other man" and knows just a little more than any "scientific chap" who has studied bacteriology or any other "ology."

There also appears to be a false idea with reference to our commercial standing in the eyes of the world should it become known there is any taint on our stock or products. While we should by all means possible maintain the highest standard of purity of stock and products, nothing is gained by pretending to be what we are not. We are altogether too sensitive to such a slight thrust at our vanity as is contained in "Our Lady of the Snows." Has the fact that Denmark acknowledged the situation and made a heroic endeavor to abate the evil, lessened the value of her dairy products or lowered her reputation in the markets of the world? Not by any means. If anything, her sanitary measures, adopted without undue publicity, have commended themselves to thinking people wherever dairy products are used and that small country has become the "cynosure of neighboring eyes."

In a previous address, recently, we dwelt on details in the production of sanitary milk, such as the need of healthy cows; clean, sanitary stables; cows milked in a cleanly manner; proper care in cooling of the milk in a suitable dairy room used only for handling milk; and delivery of the milk

to the dealer or customer at a temperature not above 50°F. We also advised a Milk Commission, Inspectors, Laboratories, etc., to insure pure milk. In consequence of this we may pass over this part and say something about milk distribution, and a word about the responsibility of consumers of milk.

Milk Distribution in Towns and Cities.

In many cases the milk leaves the farm in good condition but is spoiled during distribution. In many towns and cities the milk is sold by irresponsible milk dealers or in shops which are not by any means sanitary, and where goods are kept which taint the milk. We frequently see cans of milk distributed by a man smoking a dirty pipe and the air for several feet around the rig reeks with a vile-smelling tobacco odor. The milk from such a milk wagon or sleigh cannot be clean. Just fancy a man drawing smoke into his mouth, then exhaling it through nose or mouth and then compelling all those near him to breathe such smoke, and those who deal with him to drink milk which has been exposed to the vile odor. A man who does this, so far as his manners go, is little better than a hog.

We look for the time when the work of milk distribution in towns and cities shall be entirely controlled by the municipality, either directly as a matter of public ownership, which is the modern tendency, or indirectly through companies or corporations acting under franchises which will safeguard the interests of producers and consumers. The present method of having several small dealers driving over the same street and distributing milk from cans and wagons which are not at all up to sanitary requirements is a dangerous and wasteful plan, and lacks the essentials of hygienic and economic principles. What a waste of human energy, horse flesh and whirling wagon "vitality" goes on every year in connection with the distribution of milk in towns and cities.

Where the municipality does not feel free to engage directly in milk distribution it would, in our judgment, be a wise plan to place this work in the hands of suitable corporations. It is the duty of a town or city to see that the inhabitants are supplied with pure milk. This is fully as important a function as supplying pure water—if anything more important— because the very life of the children depends upon pure, wholesome milk. In connection with the Winter Fair at Guelph, we gave statistics showing the high infant mortality rate in the towns and cities of Ontario.

According to Jenson, the mortality among the children during the first year of life in different European countries was as follows, for the years 1891 to 1895: Norway and Sweden, 10%; Denmark, 14%; Finland and Switzerland, 15%; Prussia, 20.5%; Austria and Hungary, 25 to 28%. In the following cities, 1886 to 1895, each year, the death rate of children was: Lyons, 13%; Paris and London, 16%; Berlin, 25.3%; Munich, 31.4%; and Ingolstadt, 40.9%. He further points out that in Copenhagen (capital of Denmark) the infant mortality has decreased very significantly during recent years as follows: 1877 to 1886, 20.83%; 1886 to 1896, 19.04%; during 1897 to 1899, 17.87%, and in 1900 only 15.55% of the children under one year died in this great city, where lives nearly one-half of the population of the whole Kingdom of Denmark.

We may well ask ourselves why this is so? Many causes have doubtless contributed, but the most potent cause is no doubt the very excellent milk companies which supply the major portion of the people of that great city with milk.

Did time permit we should like to quote at length the regulations governing the Trifolium Milk Supply Co., of Copenhagen. These are given in Appendix 1, pp 239 to 247 of Pearson's translation of "Milk Hygiene," by C. O. Jenson.

We have personally visited the plant of the "Copenhagen Milk Supply Co.," one of the first in the field to supply pure milk to the people at moderate prices and can speak of the excellence of their system and plant. We understand that some of the younger companies are now surpassing the old company which at one time was looked upon as the standard for the world. Thus do we improve in our ideals. What was the ideal of one generation is considered a back number in the next.

Consumers' Responsibility.

When producers and distributers have done their part it is the duty of the purchaser or consumer of milk to also assist in the work. Milk should be kept cold—not above 50° F. and be kept so far as possible in tightly stoppered vessels. The too common practice of emptying milk into a pitcher or bowl and then setting it in a pantry, cupboard or even a refrigerator, is not a good plan.

Milk absorbs flavors from its surroundings and if in a warm place rapidly sours owing to the action of bacteria which readily fall into it from the air when milk is in left open vessels. If milk be delivered in bottles, it is best to allow the supply to remain in the bottles, assuming of course that these bottles have been properly cleansed before the milk was put into them, with the cap or cork in place to keep out the air. Do not take out more than what is likely to be required for one meal and if any be left over, do not pour it into the original supply, but keep it separate.

In the case of sickness, especially such diseases as scarlet fever, diphtheria, etc., persons should be very careful with the milk. In no case should milk be taken from the sick room to the family dining room. Special precautions should be observed in order to cleanse the milk vessels used in the sick room and more particularly is this the case with the milk bottle before it is returned to the dealer. In my judgment a paper milk bottle, which is used but once, is more sanitary, and is likely to supplant the glass bottle now in use. Quart paper bottles cost about one-half a cent apiece and in the long run are likely to be less expensive than the present bottles when we consider the labor of washing, cost of hauling and danger of spreading disease.

To consumers we would say, do not be afraid to pay a good price for pure milk. Insist upon its purity and be willing to pay the producer and distributer for extra care and cleanliness. To produce and distribute sanitary milk costs time and money for which consumers ought to be willing to pay. Good pure milk at ten cents a quart is one of the cheapest foods which can be purchased. Impure milk is dear at any price. Milk with a sediment in the bottom of the vessel is unfit for use. A person selling such milk ought to be prosecuted as it is a menace to public health.

A little care exercised in the selection of a good milk supply and a little extra price for extra care and cleanliness will often *save* many dollars spent for medicine and medical attendance and prevent many sorrows in the home.

Let everyone help in the campaign for clean, wholesome milk!

STABLE VENTILATION.

By J. H. Grisdale, Agriculturist, Experimental Farm, Ottawa.

The subject I have to treat to-night is "Stable Ventilation," a subject which, up to very recently, received too little attention, but a subject which I am happy to say is getting more and more attention as we learn to appreciate its importance. You have listened, with a great deal of interest, to the remarks made by Prof. Dean, on "Production of Sanitary Milk." He did not touch upon one side of it, which I think is the most important side, that is conservation, or insuring of the health of the animals in the stable, and if there is one means more certainly conducive to health than another in our stables, it is ventilation. Just to give you something in support of my statement let me cite an experiment that has been worked out quite recently. I heard it from Prof. Pearson, of Cornell, the other day at Picton. He said that at Ithaca they took two herds of cattle, six in each herd, and in each of the two herds there were four perfectly healthy animals and two that had tuberculosis. They put four healthy ones and two unhealthy ones in a stable where the ventilation was very defective, and four healthy and two unhealthy ones in a well-ventilated stable. They interchanged the two lots of diseased animals, keeping two of them for some time in the well-ventilated stable, and then transferring and exchanging them for the two diseased cattle in the other stable, so that each stable would have an equal chance of infection. At the end of seventeen months they killed the whole twelve animals, and they found in the ill-ventilated stable every animal was diseased and some of them very badly diseased. In the well-ventilated stable, two of the erstwhile healthy animals were slightly attacked, but the other two were in good health. You thus see the advantage of good ventilation; fifty per cent. of the healthy animals exposed to disease in well ventilated stables were slightly infected, and fifty per cent. not at all infected. In the poorly-ventilated stables on the contrary, all were badly diseased. Any disease which can attach animals, is much more rapid in its attack in an ill-ventilated stable than it is in a well-ventilated and well-lighted stable. Then, again, good ventilation is conducive to economy of production. I regret that I am not prepared to speak definitely of influence of ventilation on economy of milk-production. We had, at the Experimental Farm, a stable in which there was no ventilation. It had not been built for a stable, but simply for a shed. Steers were turned in and the shed closed up, and they were kept in there for some five or six months. They made practically no gains; some made losses. We then put in a thorough system of ventilation, and in the same stable, similar steers under exactly the same conditions of feeding, everything similar except ventilation, made splendid gains. From the consideration of healthfulness, and from the consideration of economic production, it pays to have a well-ventilated stable.

I regret to say that there are many stables yet, in this country, where poor ventilation is the rule. In many stables one notices "stuffiness." When you go into the stable you immediately feel you would rather have some outside air,—that is an indication of lack of ventilation. If you went into a properly ventilated stable, you would not notice it at all. It is impossible to entirely free a stable from odors since there are so many factors that go to make up odors, but you can get fresh air in every stable, and the methods of getting this air are very various. If you have not enough air, you can open the windows and if you open them on the side from the wind so that the air will not rush in and hurt the animals, no objection can be

offered, but if you open them on the side the wind comes from, there is danger of draughts. Opening and shutting windows is not very convenient and is not perfect ventilation. If you cannot introduce a first-class method, here is a system that will give satisfaction in a measure. Below the ceiling, bore a number of holes right through the wall, and have them at intervals of about six or eight feet around. If the wind is blowing from one side it is an easy matter to partially plug the holes. That is a method I have seen working very satisfactorily, but it is not advisable for the reason that it is apt to be neglected. We are apt to have too much ventilation on a very windy day, and too little when it gets warm.

Another method is what is known as the Muslin Curtain Ventilation. It owes its origin, I suppose, to the fact that the poultry men have used it in the place of glass in may of their cold houses. Now, the Muslin Curtain Ventilation means the placing of sheets of cotton or cheesecloth over the windows, removing the glass and the air strains through it. The system has some good points. If you cannot get a better one, introduce it; it will do satisfactory work if you are careful to exercise perfect control over it. If you are watchful and always ready to jump the moment you think there is any change in the temperature or change in the wind, then it will prove satisfactory. But the greatest difficulty we find is that its effectiveness depends almost entirely, upon the direction and velocity of the wind and, if there is no wind, it is totally ineffective.

Our herdsman has been very careful in carrying on a test of muslin curtain ventilation. I am dealing more at length with this system than others. for the reason that it has been receiving considerable attention in the Agricultural press, and many people have been writing to me personally, and to the College at Guelph. We have on this account, some definite information on the subject. From December 23rd until December 28th, we kept an exact record of the temperatures inside and outside, and the velocity of the wind and the arrangement of the windows. We have a stable 100 feet long; on each side there are ten windows, and we have 9 curtains on each side, 5 on one side and 4 on the other. We have been testing this since the first of December, the curtains are still on and the history of the experiment is as follows:—

Early in December we had a few warm days, we closed the doors and opened the windows and during the night the temperature rose to 82° Fahr.; there was no breeze. There were 40 cattle in the stable, and the temperature outside was 38°. Of course it did not take long to get more air in the morning, but we had to open the doors to get it. The eighteen windows were all open, but the air could not get in. When the weather got cooler, we opened nine windows on each side, and took the record of temperature on the inside and out and the temperature in the cow stable adjoining in which there was another system of ventilation. On the 23rd, nothing very remarkable, we had a light breeze, and the temperature in the two stables was practically the same. On the 24th, still nothing very remarkable, light breeze and the windows open, and the temperature outside 24 or 25, and inside from 44 to 50 in both stables. On the 25th, not very much difference, a good deal colder outside, 14 or 15 outside and 48 to 52 inside, very light breeze, working nicely. On the 26th it was rather calm outside with a very light breeze at first. We had all the windows open in the steer stable, and the temperature rose from 46° to 62°. As the breeze fell outside, the temperature rose inside in spite of the fact that all the windows were open, showing that this system depends entirely upon the breeze, for its effectiveness. In the open air, the temperatures during the eight days were: Maximum 36, and

minimum 2 above zero; in the cow stable maximum 53° and minimum 46°, and in the steer barn maximum was 62° and minimum 36°,—a range of 25 degrees, as compared with a range of 7° in the cow stable, and it kept us opening and closing windows every little while. Thus, I think this Muslin Curtain Ventilation is open to several objections. In the first place it requires some one watching it continually. If you go to bed at nine or ten and do not get up until the next morning at five, there are chances of great changes in the temperature. Secondly, the interchange of air necessitates the warm inside air impinging against the cold curtain on one side and so causes a precipitation, the curtain gets wet and the next thing you know the wind changes, and the dirt that collects on the windows is carried back into the stables. This repeated drying and wetting turns the curtain black. All of the curtains in our stables are quite black now due to this cause, and further we found it impossible to keep the ceiling free from moisture.

In the main barn, where another system is in operation, there is not a sign of moisture on the ceiling or walls, whereas in this stable, the walls are covered with moisture, while this system was in operation. The building is just as well constructed as it is possible for a building to be in this country. It is double-boarded inside and out and has an air space; yet it was moist. In the main building, where the other system is in operation, everything was dry and nice.

We have what is known as the King System which has been more or less talked about, and this is undoubtedly one of the best systems known to-day. I have seen it in operation, satisfactorily, at a great number of places. We have had it in operation at the Experimental Farm, but for the reason that many of our buildings are old ones, the system had to be introduced the best way we could,—that is slightly modified from the original King plans. It was impossible to introduce it exactly as it should have been, hence we are not prepared to say that it would always be satisfactory, but I have seen it in stables near here giving perfect satisfaction, I refer to the stables that Mr. P. Clark built. He had a good deal of difficulty with the system at first, but now it is working satisfactorily I understand. This system is somewhat different from the average system in this, that it takes the foul air from the floor or near the floor. Chutes are constructed with their openings near the floor, and go right up to the ceiling and out on the peak of the roof in a sort of chimney. The pure air goes up through the wall to the ceiling, and sometimes along the ceiling, and is shot out into the stable from the ceiling. Instead of letting the air go off from the top, usually consider the best method of ventilation, the air is taken from the bottom. The reason given by Mr. King is that the impurities in stable air, being chiefly carbolic acid gas, a heavy gas, it with others sinks to the floor. Therefore it is from that point the impure air should be drawn. There is a good deal of common sense in his contention. There are, however, some objections to this system. If you take the temperature at the ceiling, or half way down, and at the floor, you will find the temperature at the ceiling considerably higher than at the floor. The warm air rises to the top, and has no means of escaping and lies there until it cools and sinks to the bottom and the coolest part of the stable is the floor. Now, that is where the animals lie and it should be as comfortable as the rest; hence is seems to me somewhat of an objection against the system.

Another system of ventilation which might be installed is the Rutherford system. It has been advocated strongly by Dr. Rutherford himself. It is used in our new horse stable, which I would like any of you to visit. We have the two systems in that stable,—the King system and the Rutherford. We do not put them both in operation at the same time. We have been work-

ing the Rutherford chiefly, although the King system is there, and can be put in operation at any minute. It is only a matter of ten minutes to change the system, just the matter of closing a few doors and opening a few others and the deed is done. As to the purity of the air, I cannot say that there is very much difference between the two systems. One point we have found is that the Rutherford system is easier to control. Acting upon what we had found in connection with the horse stable last winter, we introduced the Rutherford system of ventilation into our new cow barn.

At intervals along the ceiling are openings into pipes; these pipes or chimneys should extend right to the roof in as straight a line as possible. Of course if it is necessary to twist and turn a little, it can be done and the outlets will still work satisfactorily. There are, however, some objections to bends in the pipe because there is apt to be more or less precipitation at the elbows and the water runs down. Where the shaft is straight, however, I have never seen any difficulty at all. That outlet ought to have six to eight square inches of space for each animal. At the Experimental Farm we have a good deal more than that, but we are experimenting all the time, and we watch to see what will be the effect of having different areas. We are in a position to control the outlets and shut them off so that there will not be one-sixth of an inch for each animal.

The inlet is at the bottom. Right under the outside wall passes a kind of pipe which comes up near the wall, or if you wish you can carry it out to any point you like. In our stable we carry it some considerable distance. We have, I think, some eight or nine inlets in our stable, each about six inches wide and four feet long. If we open them all up we can bring the inside temperature to the outside temperature in a very short time. About three square inches of inlet per head is sufficient at this time of the year. A square foot would thus give you enough for forty head or thereabouts. I think if we put one square foot of inlet for twenty head of cattle it would be safe for all seasons. The outlet needs to be about the same size, preferably somewhat larger. We have about 36 square inches or more per head, but I think that is too much. This system is working very satisfactorily in our main barn where it is in operation. There is not a sign of moisture on the ceiling or on the walls. In our horse stable where we have had the Rutherford system in operation, there is not a sign of moisture on the walls or on the ceiling, and I must say the same thing for the King system, there was not a sign of moisture except in one little corner where there was not good circulation. To get rid of the moisture you must have circulation of air. Because you see moisture on the walls or ceiling, it does not necessarily mean bad ventilation; it means rather that the walls are not properly insulated, or for some reason the air lies there a longer time than it should.

At what temperature should we keep our stables? I think for the average stable from 45 to 50 degrees is about the right temperature. Sometimes we hear people talk about 60 to 65 degrees. In my opinion that is too high. If you keep your stable at 45 to 50 degrees you are almost certain of having good sanitary conditions and good ventilation. I come to this conclusion from experiments with a number of cattle in the barns, and from watching the results of good and bad ventilation, and from watching what happens in other barns where the conditions are different from our own. I have gone over this very hurriedly as the time is short. It there are any questions that you would like to ask, I shall try to answer them.

Q.—How many outlets would you have for a stable with 32 head of cattle, and the stable 36 by 54?

A.—I would have two outlets.

Q.—My hay car runs along the centre?

A.—Run your ventilators up on the side, provided you carry it up beyond the peak; that is take twelve feet over from the wall and take it straight up through your roof and three feet above the peak.

Q.—How large would you have these two?

A.—I would have them a foot in diameter, or better fifteen inches square. A foot would be large enough so far as air is concerned, but if you have a small shaft you are certain to have some drip under, and if you have a large shaft the air rests against the wall and there is a current in the centre as in all currents the speed is in the centre, where there is the least friction.

Q.—What would you build the shaft with?

A.—Wood, and if you found there was a drip, I would sheet it outside and that would cure it.

Q.—How many inlets would I require?

A.—I would put in four, two on each side, and each of them eight inches square, put one of them about ten feet from each end or twelve feet from each end, that would ventilate your barn and give good circulation.

Q.—Could you not get better ventilation with a galvanized pipe?

A.—We have tried both, and if you are anxious to have no drip, do not use galvanized pipe; it is better to use wood.

Q.—You want the wood practically air-tight?

A.—Yes, it must be well-built.

Q.—Did you ever know one of these pipes to freeze right up?

A.—No, that was because your pipe was too small; I think fifteen inches is about the right size.

Q.—Would you bring that outlet any lower than the ceiling?

A.—No, just flush with the ceiling so that the air will run along the ceiling and up the pipe; then there is no danger of any moisture on the ceiling.

Q.—At what temperature do you keep your horse stable?

A.—About forty-five.

Dr. RUTHERFORD: In order to make the ventilation perfect, the air should come in on the level.

Mr. GRISDALE: I have followed the current that comes in and I find that the cold air comes down and hits the floor. We have it in the barn three feet high, and from that height it throws it to the floor.

Dr. RUTHERFORD: I admit that, but the fact of having a current of air from the floor to the ceiling is to my mind worth far more than the little trouble of getting the pipe under the wall.

Mr. GRISDALE: Sometimes it is difficult to get the pipe under the wall and I think that getting it above is so much better than not having it at all. Of course, I would rather have it under if possible. To protect the inlet from snow or too strong a current of wind, it can be covered with a little cabin which stands against the wall, not right close to it, but within about four or five inches of the wall.

Dr. RUTHERFORD: If your stable is properly built, and there is no other way for the air to get out of that building, the outlet will close the inlet every time.

HILL SELECTION OF SEED POTATOES.

By T. G. Raynor, Ontario Representative of Seed Branch, Ottawa.

The address on the above subject was also delivered at the Winter Fair, Guelph, and is printed on page 58. The following discussion on the address took place at the Eastern Show:

Q.—Which would be the best seed, 2 ounces cut from a big potato or a small potato weighing 2 ounces?

A.—I would prefer 2 ounces out of a big potato. If I were planting small potatoes I would not bother about the seed end.

Q.—Do you recommend cutting these small potatoes?

A.—No, I would not cut those small potatoes.

Q.—Would you get too many stalks by planting these small potatoes?

A.—No, I do not think you would.

Q.—It is my experience that you get too much stalk by planting small potatoes?

A.—Sometimes that follows and sometimes it does not. It depends on the condition of the soil and the climatic conditions. What we want is a large yield of marketable potatoes that will meet the m rket requirements, and every potato grower ought to study the market he is catering to. He should find out what the market wants in size, color and shape of the potatoes, so that he will be able to supply them with the variety they want. It is bad policy to mix up three or four breeds of dairy cattle, and it is bad policy to grow too many varieties of potatoes. Don't you know that we nearly lost the Toronto market by doing that kind of thing. Our New Brunswick friends who grow potatoes wholesale were sending up to Toronto car loads of potatoes that were uniform in size and shape and the people paid 10 cents a bag more than they would for Ontario grown potatoes, and Toronto consumes between three and four thousand bags of potatoes in a day.

This year the Eastern potatoes have rotted because they had too much wet down there, and if we grow the right kind we will be able to get the Toronto market back again.

Q.—What do you include in the term diseased potatoes?

A.—I want a potato that is free from anything that would be objectionable. When I want a potato disease-proof I want one that is the least subject to blight. That is the disease that gives us the most trouble, and we want to find out the potato that will give us the least trouble in blight. I have a potato here that you would think was almost perfect. You will notice that the eye is right out on the surface and will necessitate very little waste in peeling that potato and this other one here, the eye is too deep, and the housewife would peel off a great deal of it, and it is necessary to select a potato that is shallow in the eye. If we select the best from the best every year we can maintain the standard of quality for thirty years and then we may have to get a new variety of potato. Now I will cut this good looking potato in two and you see that it is discolored. It shows the presence of quite a large number of water holes, Medullary rays, as they are called. It contains very little starch and is likely to cook more or less soggy. There are a large number of potatoes grown for alcohol and starch purposes in Germany.

Q.—What do you regard as the best way to keep seed potatoes over the winter?

A.—If the man can control conditions, I would say pit them outside. Put enough covering on to keep them from freezing and then you have the

best conditions for keeping potatoes for house use and for seed purposes. Early in the spring bring the potatoes out and spread them on the floor in thin layers so that whatever growth that starts will be very strong and short.

Q.—How would you cut those potatoes for planting?

A.—I would cut them to one and two eyes, and I would prefer to cut them longitudinally so as to have two to three ounces in the piece.

Q.—Two ounces would be the limit?

A.—Yes, I would prefer a three ounce piece to a two ounce piece, if I could cut with one or two eyes.

Q.—Some contend that a potato should be cut only length wise?

A.—There is a little preference for that.

Q.—Would it be better to plant that potato you have whole or cut it in pieces?

A.—I would prefer to cut it into good sized pieces and plant two pieces in hills to get the largest yield of marketable potatoes.

Q.—If you were planting potatoes that size how far would you put them apart?

A.—I would want to plant them at least two feet apart and perhaps three feet would be better if planted in hills.

Q.—You would just put one in a hill?

A.—One piece or whole potato in a place if 15 inches apart in drills, and from one large one to two medium sized ones in hills.

Q.—Do you get better results from hills or rows?

A.—You get more marketable potatoes by planting them in hills. That potato weighs 12 ounces; if you were planting them 15 inches apart in the row and 3 feet between the rows, and if you get three potatoes to the hill weighing about eight ounces you would have a pound and a half to the hill and you would get 290 bushels of marketable potatoes to the acre and the average for Ontario is about 110 bushels per acre. This year it was 114. We had an estimated yield of 21,000,000 bushels off of about 183,000 acres in the Province of Ontario this year valued at between $9,000,000 and $10,000,000, and that is better than we have had for the last eight or ten years. I believe it will pay us to look into this question of potato growing, especially in sections where the land is adapted to it.

Q.—Would you recommend any particular kind of fertilizer?

A.—I believe in making the ground rich, give it plenty of nitrogen, and it also ought to have potash and phosphoric acid. If, after growing potatoes for sometime, on the same land, you find your yield going down, you could apply plenty of stable manure (and the best kind is horse manure, because cow manure is very likely to cause the potatoes to be scabby. If you plant clover and plow it under you have a good means of freshening the land, but if you find the potatoes do not do well it is an indication that the land lacks phosphoric acid and potash. I believe a potash fertilizer will give the best results in a potato crop.

Q.—Give us the variety you recommend?

A.—The variety I would recommend would be the variety that does best with you in your locality, and that meets your market requirements. I could not give you just what that variety would be without I knew your local conditions. If you look over Professor Zavitz's report you will find the potatoes that are doing best in the different sections.

Q.—Which is the best time to apply the manure?

A.—I think the best time is to apply it to the clover sod in the fall of the year. You have heard of T. B. Terry, the great potato grower? He had a rotation of clover, potatoes and wheat, and he made himself wealthy growing potatoes in that way on a small farm.

JUDGING SHEEP.

By H. S. Arkell, Professor of Animal Husbandry, Macdonald College, Ste. Anne de Bellevue, Que.

The subject given me to discuss this afternoon is sheep judging, but before taking up the method of judging, I would like to say at the outset that the judge of any class of animals, before he can do efficient work, must have in his mind some concrete idea of what he should look for in the class to be judged. That is to say, he must have the outline and desirable characteristics gathered into an ideal in his mind's eye. In the first place he ought to consider what the animal is bred for, and then he must understand fairly well the points that go to constitute excellence in a superior animal. It may be well to say further that a good judge should have some experience in handling sheep before he can consistently establish a standard. Upon these things I would place some emphasis as an introduction to my talk.

There is one final test of any animal's value and that is the ultimate end for which it was bred. In judging horses we have either the requirements of speed or draft; while in the judging of sheep, cattle or hogs, the final test is the block. Whether we judge from the breeder's or feeder's standpoint we must have in mind the final test, viz., the market requirements of the particular class of stock upon which we are called to arbitrate.

In the first place, I would call attention to the form: a sheep should be rather close to the ground, short in the legs, compact in the body, broad on top. There is a reason for this. The prime cuts of a sheep carcass come off the loin, back and rib, hindquarter and leg. The butcher aims to cut as much flesh on these particular parts as possible in order that there may be little waste and as well that he may sell these cuts to advantage. These command the highest price on the market. The flanks, belly meat, forequarter and brisket are relatively cheap meat, and the butcher must make his gain from the highest priced meats, cutting, as I have said, from the loin, rib, back, rump and leg. We find that we may expect the largest amount of flesh off the highest priced cuts when the animal approaches a certain form—such a form as I have described, as found in an animal that is somewhat short in the body, low to the ground, and compactly made throughout. Contrast with this an animal that is long in the leg, tucked up at the fore and hind flank, long in the back and shallow in the body and you will find that there is very little flesh carried either above or below, that the loin is frequently bare, that the hip bones are somewhat prominent and badly covered with flesh, that the leg of mutton is light and that too great a percentage of weight is made up by the cheaper cuts and by the waste material of the carcass.

Starting at the shoulder, the back should be moderately short, the ribs well sprung and filling in well at the back of the shoulder. We like a full spring of rib, for with it will be associated a relatively broad loin and usually a thick covering of flesh. The loin should be broad and the fleshing upon it should be thick and should cover neatly over the hip so that the point of the hip bone is not manifest; the rump should come back level and then turn down nicely into the leg; the leg should be well rounded out with flesh which should run down full and trimly to the back both on the inside and outside. A long-legged sheep can rarely carry a desirable leg of mutton.

The butcher looks for a relatively light forefront with a light neck and brisket, and if we are judging from the butcher's standpoint we should keep this in mind. The forefront of the sheep is relatively cheap meat and he wants as little waste as possible there, and if you find the neck and brisket

very heavy and full and a heavy covering of fat over the shoulder and collected at the fore flank, it is not desirable and should be scored in judging. You will find in an old sheep that is over-done, that the weight forward is too great in proportion to the weight back, and it is not a desirable characteristic in a high class butcher's carcass.

If you turn a sheep up you can judge somewhat of the amount of flesh carried throughout the body by the amount of muscle covering the breast. A sheep that is poor and bare between the foreleg and brisket is very frequently lacking in flesh throughout.

Another good way of judging the amount of flesh in proportion to fat is here at the dock. You will find that if the dock is heavy and unduly covered with surplus fat, there will be a lack of lean meat in the carcass. On the other hand, if you find that the rump is smoothly covered with lean flesh and that the dock, just at the junction with the body, is full, firm and fleshy to the touch, you will usually find that the carcass has got a relatively high amount of lean meat in proportion to the fat. That is the thing the butcher requires in his dressed carcass—as much lean meat as possible with enough fat to give it quality and delicacy of fibre to make it palatable on the plate.

Another point to consider is the quality of the flesh, and that is judged largely by the touch. How to describe the touch is rather a difficult matter. Feeders will tell you that it is one of the strongest points in estimating the excellence of fleshing, particularly from the butcher's standpoint. It indicates the way in which the sheep has been fed, the amount of lean meat in the carcass and the freshness of the fleshing. It indicates further whether or not there is a large amount of surplus tallow or fat. The fresh touch is what is desired or contrasted with a stale touch that is so often associated with an over-done animal. There is a firmness and freshness and elasticity of flesh as it meets your hand that can only be recognized by constant practice, but is nevertheless the truest guide as to the quality and character of the meat below.

In reference to the wool we may say in the first place that it is an indicator of the condition of the animal. A dry, harsh fleece tells a story of unthriftiness with a corresponding lack of freshness in the flesh. The wool itself may therefore indicate quality in the carcass and a healthy, bright, lustrous fleece with sufficient yolk and body gives promise of a wealth of flesh below. Quality may also be judged by the character of the bone appearing in the head and leg. Rough, coarse bone will mean waste when the animal is killed, and too fine bone is associated with a tendency to fat production. Bone of medium strength and of fine quality should be sought for in animals bred for flesh production.

In market and show sheep, undesirable characteristics such as softness of flesh and an overdone condition may be noted particularly. We like to have a firm resistant pressure under the touch. When the hand sinks too easily into the flesh it indicates softness and an undue proportion of oily fat. In the overdone condition you will find an accumulation of tallow down about the fore flank, along the rib and over the rump, which is a very undesirable feature as it indicates waste when the animal is slaughtered. This we should guard against. We should educate ourselves to recognize the value of the touch in judging market animals since we can depend upon it as a safe guide in estimating the quality and fleshing of the carcass.

We have hitherto emphasized these characteristics, form, flesh and quality. These together with the wool should receive chief attention in judging market sheep. The feeder and breeder however must not forget the importance of constitution in the animals they own. They need an animal

that will continue to grow and make generous gains through the feeding period. A sheep with a long body and long legs, shallow in the rib and very narrow in the heart girth will not be a profitable animal to feed. If on the other hand you take the compactly made type, close to the ground, short in the legs, deep in the body, you will find a large girth and sufficient strength and substance to indicate that it will make profitable gains. We should seek a sheep, too, with a relatively short head, somewhat broad between the ears, with good breadth in the forehead. You will find that a sheep that is long in the face, and narrow between the ears and in the forehead, is frequently lacking in substance, being long in the legs and shallow in the body. We desire also a relatively short neck which should blend well into the shoulder. We want also breadth in the breast and across the floor of the chest and a full girth behind the shoulders, which will indicate plenty of lung and heart room.

From the breeder's standpoint there is one other thing to look for and that is breed type or character. We have our different breeds. Leicester, Shropshire, Southdown, Dorset, etc., and each breed has some particular individuality about it to distinguish it from other breeds. Breeders of sheep are sticklers for trueness of type, and rightly so. The wool or fleece will be an important point of distinction. We have the peculiar Leicester, Cotswold and Lincoln fibre, and there is a difference also in the Oxford, Shropshire and Southdown wool. If we would judge breeds of sheep we must study breed characteristics and the characteristics of the wool will be an important consideration in this regard. There are certain features which should be sought for in all wool, such as evenness of distribution and of quality, length and strength of fibre, density, together with a bright healthy lustrous appearance, but beside these things there are the characteristic differences in the wool of the various breeds which should be fully understood.

In reference to character in breeding sheep, I would say that in the male we look for a strong, impressive appearance, and an erect somewhat bold carriage. He should stand strong on his pasterns and the bone in his legs should be of good texture and quality. The female should have a finer and milder appearance about the head and neck and should not have quite so bold and a less erect appearance. I would mention again the importance of constitution and breed-type or character in our breeding animals whether male or female.

In judging sheep we should have some method in going about our work. I like first of all to take a view of the sheep from a distance to form an estimate of the animal as a whole, and this method saves time in judging a large class. With the individual we may commence at the back and work forward. Your hand should get down below the wool. It must be firm in its pressure. By keeping your hands somewhat flat you will get a truer estimate of the covering of flesh and that method will avoid leaving unsightly finger marks in the wool. By following some definite system and by careful selection and comparison ease will come in choosing even between close rivals.

Q.—What point would you lay the most importance on?

A.—I should think you should judge largely from the breeder's and feeder's standpoint because when emphasizing that you are usually emphasizing the butcher's standpoint as well.

Q.—Do you put any stress on the way in which the front legs are set under the sheep?

A.—I should have called your attention to that. We want width below in the floor of the chest and the legs should be set strongly and firmly under the body. We like sheep to stand erect on their pasterns.

Q.—Is there anything in the size of the nostrils?

A.—We do not like too narrow or contracted a face. We like a strong face, not too bold or coarse, but sufficiently strong to indicate substance.

JUDGING BEEF CATTLE.

By John Gardhouse, Highfield.

I understand that there are some three or four more speakers to come on yet, and I think I would be showing good judgment by not detaining you very long. I will deal with the question from the breeder's and feeder's standpoint. I always take it that the breeder's standpoint is the commencement, that is, the laying of the foundation, and if you start right the probabilities are that you will finish right. If we do not start right, we will not finish right. In judging an animal you must have an ideal before you, and aim to keep up to that ideal, and then you will succeed. I remember a man who came out from the Old Country, who had been managing a large estate there, and he brought with him a picture of one of the best cows on the estate. He hung it up in his room, and he said, "That is my ideal, and that is what I am going to aim at." We want a beef animal, very strong on the back and nicely arched at the ribs, so that we have lots of flesh and muscle where the valuable cuts are.

In judging an animal from the breeder's standpoint, there is something else to be taken into consideration, and one of the first things is,—breed character and breed type. I am quite willing to admit that I cannot explain, just exactly, what I mean by breed character and breed type. You must have an idea of the breed you are looking for, and know it for yourself. If you are judging Shorthorns, look for an animal that has got that Shorthorn character, and Shorthorn type. If Hereford, or Polled-Angus or Galloway, or any of these breeds, it is important to look for breed character and breed type. We must always have an eye to the utility of the animals we are producing. One thing that should be looked for in the animal is to see that is has a good constitution. You cannot make a success of breeding live stock of any kind unless you have got an animal with a good constitution, and in order to get that, we must always look at the head to see that you have a nice broad forehead, nice width between the eyes, nice clear eye, not wild or vicious and not too long from the eye down to the nostril. If you have a shortish head, and a nice mild eye you are likely to have an animal that will be a good feeder. I think that is a beautiful head and neck. I think that neck is just about what we should look for in any beef animal. The neck is blended well back into the shoulder carrying a great wealth of flesh. The shoulder should be well covered with flesh, and there should be no depression after it leaves the shoulder and follows all along the ribs. It is true that this is a cheap part of the meat, nevertheless, from the breeder's standpoint, we want this covered, and this depth of heart girth, so as to know we have constitution and feeding qualities.

Right along the back here where the best cuts are, we want to get that very strong and deep. It is a difficult matter to get that arch of rib and depth of body. It is not a hard matter to get that depth of body, but it is a hard matter to get that depth of body with that amount of muscling and spring of rib on top.

It is important in judging live stock that you look for that arch and depth of rib. Another thing very important to look for is the hip bone, which should not be prominent, and which should not stand out as they did on many of the animals years ago.

Everybody then thought if you walked into a cow stable and saw a cow with big hip bones she was a good cow. We do not want that at all, we want a beast that has a wealth of flesh over the hip-bone, so that when they are dressed there will be none of the coarseness of bone that we used to find in our cattle. We want length of quarter. Another very important thing to look for is the touch of the animal, the quality of touch of flesh, and probably there is no better way of indicating that, than by the hair that the beast carries. It is very important that you have a good coat of hair on the animal, and that it should be nice and silky and fine, so that when you put your hand on the beast it should feel fairly firm and yet not too hard. There is a great difference between flesh and fat. You can only learn how to tell that by paying a good deal of attention to it, and in the handling of the animal.

Every man should have some system to follow in judging cattle so as to know what he is doing. I always like to walk around and get a general view of the animals first, and then I go around to their heads and get an idea as to the breed character and breed type, and then I like to look at their heads and size them up in a general way. Then I like to get them closer together and weed out those that are not so good, and take them up to the other end of the ring, and perhaps, before you finally make up your mind, it is not a bad plan to stand them one behind the other and get the general appearance of the animals; get the depth, and top and under lines and the way they stand on their legs, and how the neck is blended into the shoulder, see whether there is any openness in the shoulder, and whether there is any depression in the ribs back of the shoulder.

Q.—How about the width between their front legs?

A.—It is very important that you should have good width in an animal of any kind; but I do not want the width to be made by standing the legs out at the corners. We want width and muscle and strength between the front legs.

Q.—In regard to hair, do you like a mossy coated animal?

A.—We want a mossy coat, all the hair you can get on them with that nice mossy feeling when you take hold of it; that indicates a good feeder. The skin should not be too thin nor yet too thick and hard; but a medium thickness of skin.

Q.—Do you judge any by the horn?

A.—Of course the horn has a good deal to do with the general appearance of the animal. It is always important in animals of any kind to get a good appearing animal, and the nicer set horn you get the better appearing head you will have; but I have known very good animals that had very bad horns.

Q.—Is there any thing particular in the size of the tail?

A.—We do not want a big tail.

Q.—Do you consider that a good all round animal?

A.—Yes, if we had lots of that kind in this country it would be all right. We haven't got enough of that stamp. That heifer will only take one stall in the stable. She will not occupy any more room than a poor animal would, and would take no more feed.

ECONOMICAL FEEDING OF SHEEP.

By John Campbell, Woodville.

You will notice that the talks to be given now are along different lines. We have been shown by the previous speakers what perfect, ideal animals are, and what we are feeding for, and now we are going to talk along the line of economical feeding. We are obliged to study economy this year whether we are willing or not; this is one of the years that bring out good management. We have been very much favored in past years with a great abundance of crops, but that has not been the case throughout some parts of Ontario this year.

You must feed so as to maintain flesh in a growing animal. Economy in feeding the domestic animals of our farms at the present time consists in so feeding that there is a constant gain from the time they are born until they go to the market. In order to feed in the winter economically, it is necessary that our animals should go in the winter quarters in good condition, because it is an established fact both in cattle and sheep husbandry, that an increase in gain can be put on them in the fields at about one-quarter to one-third of the cost that it can be put on in the winter quarters. Therefore, the fall of the year is the time when our sheep should gain flesh rapidly, when it will be a comparatively easy matter to carry them through the winter months economically, if started in good condition.

There is just one plant that every farmer should have on his farm and that is rape. If there is one feed more than another I pin my faith on for a flock of sheep in the fall of the year, it is a few acres of rape. To get the best results from a rape field, it is necessary to have grass with it. I have tried the experiment and put a similar number on rape and grass. Rape alone gave eleven pounds a month increase, and rape and grass gave fourteen pounds a month increase per head. Why is it necessary that we should get them into good flesh before they go into winter quarters? In order to carry on more cheaply the lambs that are being finished for the market. If you have been in the habit of disposing of your lambs in the fall of the year, you are throwing away your best chance for large profit, because you can get so much more for them later.

In feeding sheep in the winter months, it is necessary to make the feed palatable. Palatability is the key note to the successful feeding of the flock when housed. This year we have not had at our disposal just what we would like to have. In mentioning the feeds found in many years to be the most successful with us in carrying on the flock of sheep, I will give them in just about the order of value as we have found them. Dealing with the coarse fodders, the first choice is unthreshed peas cut a little on the green side. That can be fed with the greatest profit exactly as it comes from the field, no threshing, no grinding, and fed in properly constructed racks. The next I would mention is alfalfa hay, which is largely in the stage of experiment throughout this Province, although some of the western Ontario feeders have had great success with it. With us, in middle Ontario, common June grass crowds it out in four to five years, yet I think it is going to be one of the leading forage crops of Ontario in the future, when we understand the kind of soil to grow it in successfully, coupled with proper management. The third selection is clover hay. It is one of the best kinds of roughage we have for sheep. Remember in the flock that is kept to produce lambs for butcher's block, it is not necessary to have them earlier than the latter part of April or the beginning of May. In that line of breeding pea straw will furnish a very good kind of feed with clover hay. For late lambing I do

not think it is absolutely necessary to use unthreshed peas or grain of any kind if the ewes are young and strong and thrifty. If there are any ailing ones, it is well to give them a little extra care and feed. This year it is likely some have got the sheep and have not suitable feed. In a case of that kind, oat-chaff and oat-straw will answer the purpose if we have nothing better; of course, if you have better feed by all means give it to the sheep, because there is no animal on the Ontario farm to-day, nor has there been for the last ten years, that gives such large returns or so much clear profit for the feed they consume.

With these rougher feeds, flock owners can use the cutting box to good advantage. I would not approve of cutting it with sharpened knives, but would rather put it through a cutting box that was dull, so that it would be shredded, aiming to make it as fine as possible. Then pulp your turnips and mix in with the cut feed, making a very palatable food that sheep will be fond of, and will do well on. Of course, we pin our faith to oats for safety and growth, but the question of price comes up. I believe in oats and bran, but we have other feeds that, in my opinion, are far cheaper and that will give us as good results at much less cost, and that is cornmeal and oil cake. Some people say that cornmeal is not fit for sheep, but in case of necessity you could use it in conjunction with the feed that the Ontario farmers pay little attention to, namely, oil cake. Let me repeat that oil cake is one of the cheapest and best feeds we can get to carry on our flocks, and with the addition of these concentrated feeds there is nothing I know of to-day that will give growth and substance to lambs as plenty of Swede turnips. They can be successfully fed at the rate of ten pounds per head per day. Never feed mangels to in-lamb ewes, and do not feed turnips too liberally. In Scotland they say, "a large crop of turnips means a small crop of lambs." I do not know much about ensilage, but have a friend who is feeding it, and he speaks very well of it.

Q.—What do you think about ground flax in place of oil cake?

A.—It is all right to use ground flax seed in limited quantities the same as bran, but it is a feed I do not think at all equal to oil cake.

In conclusion, for the breeders of pure-bred flocks who aim to have lambs drop in February, March and April, it is profitable economy to so feed cake, meals, roots and roughage in such combinations as will maintain a full flow of milk as to insure rapid growth of the lambs, carefully selecting so as to get the best values for the money when any feeds are purchased. The grower of market lambs can winter his ewes with much less cost, having little or no grain feeding of ewes after lambing, as that should be when grass is ready, which is the best of all feeds to supply abundant nourishment to the youngsters.

The early May lambs, well grown in summer and fall, put into winter quarters full of flesh can be carried on very profitably at comparatively little cost, so as to sell at twice as many dollars a few months later on. It is the securing of the greatest amount of gain, with the least relative cost, that constitutes economy in feeding which means success.

THE ECONOMICAL FEEDING OF SWINE.

By G. E. Day, Professor of Animal Husbandry, O. A. C., Guelph.

The previous speaker has covered the ground on economical feeding so very fully that I feel there is not very much left for me to say, unless it is to repeat a few points and possibly start some little different line of discussion.

Every man has to be his own judge as to what is best for him to do. He knows what he can do, and what he cannot do, but all the same a man that has feed in his bins is taking a very doubtful course if he sacrifices stock he has on hand. It is a very doubtful proposition to sell our live stock on a poor market in order to sell a little bit of grain on a high market, and I would advise any person who contemplates such a proceeding to think over it carefully before he decides to take that step. I think you will find that the farmers who are making the most solid progress throughout this Province are the men who have clearly thought out their line of action, who have thoroughly mastered certain branches of farming, and are sticking to those branches, trying to improve upon each year's operations, but the man who is shifting from one thing to another seldom accomplishes very much. When the price of hogs is down, he says "Hang hogs, get rid of them, cut their throats, or give them away; hogs are no good, and never will be any good any more." The next thing we know he is out buying hogs at big prices and anxious to get in again, and the chances are he will be out when he ought to be in, and in when he ought to be out. I do not believe this is a year to go into the feeding of hogs extensively, but the man who has some right good sows and a few young pigs will do well, I think, to stay with them and make the best he can out of them, rather than sacrifice them. If he has not got the feed and has to go out and buy feed at high prices, he may have to let some of them go. A man in that position deserves our sympathy, and unfortunately, that is all we can give him. But the man who has feed in his bins had better sit tight for a while.

Last year we had a discussion here on the cost of raising hogs and there was a great difference of opinion regarding how food stuff should be valued. It is one of the most unsatisfactory questions I ever attempted to handle, especially the valuing of food that is raised on the farm. It is an extremely difficult matter to attach satisfactory values to home raised products, and to avoid the difficulty we shall approach the subject in another way.

I am going to give you results from feeding 297 hogs. Some of these hogs were fed by ourselves, but by far the larger number were fed by farmers throughout the Province, and the results include both summer and winter feeding.

There are 297 hogs concerned in this calculation, and they averaged a little over 190 pounds apiece live weight when marketed. We have records of all the foods these hogs consumed, and it is interesting to find out what prices they returned for the food they consumed at different market prices for the hogs.

PRICES REALIZED FOR FOOD CONSUMED BY 297 HOGS.

Assumed selling price of hogs, live weight.	Meal, including middlings and bran.	Skim milk.	Roots.
If sold at 4½c. per lb.....	$20.45 per ton.	20c. per cwt.	10c. per bush.
" " " 5c. " "	$23.87 " "	20c. " "	10c. " "
" " " 5½c. " "	$27.29 " "	20c. " "	10c. " "
" " " 6c. " "	$30.71 " "	20c " "	10c. " "
" " " 6½c. " "	$34.13 " "	20c. " "	10c. " "

I am calling attention to these figures, because I think they are important as showing what a man may realize for the food consumed by hogs under normal conditions. These are figures actually obtained for 297 hogs marketed at a little over 190 pounds a piece.

Q.—Can you say anything amout the value of frosted wheat?

A.—If you can get frosted wheat that has some substance to it I do not think you will find practically any difference between that and ordinary wheat, but if it is shriveled up to nothing, and perhaps full of foul seeds, the value will decrease in proportion.

THE CHAIRMAN: I think the figures Prof. Day has given us are a surprise to most of us. It shows that a good price can be received for grain by feeding it to the hogs.

PROF. DAY: A gentleman has handed me a sample of frosted wheat. We have all looked at it and we think it ought to be worth practically as much as good wheat; it looks like excellent wheat.

A MEMBER: I have ordered a car of this wheat laid down at our station at 55 cents per bushel.

PROF. DAY: You have a bargain if it is like that.

Mr. PUTNAM: May I require from whom you ordered that wheat.

A MEMBER: I can tell you I ordered all he had.

Mr. PUTNAM: A number of Farmers' Institute workers will be asked where farmers can get this wheat. As yet, I have the name of only one farmer who will sell it.

PROF. GRISDALE: I got a car load lot at Ottawa at a little less than 60 cents.

Q.—How would that frosted wheat compare with shorts?

A.—I think it would be better. I got quotations form the Grain Growers' Association regarding the cost of number one wheat, which would be 69 cents laid down at our station and for number two 60 cents, and another grade 58 cents. The price of our coarse grains has fallen. The first grade was a good deal better than this sample shown here. I have not seen a sample but has a lot of weed seeds in it.

A MEMBER: With regard to the frozen wheat, a company in the town of Owen Sound have ordered a trial shipment, and it was ordered fully a month ago; it can be laid down in Owen Sound at 66 cents a bushel.

A MEMBER: The seed brokers in Toronto asked 77 cents for that same grade of wheat.

THE CHAIRMAN: From the observations I have been able to make I believe there was the worst stampede this year I ever experienced. Wherever you go, in all directions, they are tumbling over each other to get out of pigs. I believe those of us who are wise will stay in the business. I do not think it is wise to give them heavy rations, but keep them growing and in thrifty condition, and I believe that by next July it will pay you, even if you have to pay $26 or $27 a ton for feed.

ECONOMICAL FEEDING OF BEEF CATTLE.

By J. H. GRISDALE, AGRICULTURIST, EXPERIMENTAL FARM, OTTAWA.

The subject which I have to discuss for a few minutes is one which is not nearly so popular in this district as the one Professor Day has been discussing.

We feed a ration to our sows which I think is very economical and which has proven very satisfactory. We give them about one pound of bran, all the roots they will eat and a little bit of clover hay. We have not been giving them clover hay right along, but off and on. They cost us from 2½ to 3 cents a day to feed.

Q.—Do you cut the hay?

A.—We just let them eat it the same as the cows eat it.

The question I have to deal with is "Beef Production." I think it is very remarkable indeed, that we did not make a better show of beef cattle at this Eastern Fat Stock Exhibition. We ought to be ashamed of ourselves. There is no necessity for the farmers of this district to be ashamed of the beef business. A man who has paid attention to his business can make money in spite of the fact that, according to Professor Brown, it is a losing business. It is possible by feeding roughage properly to make money out of steers and show a good balance on the right side at the end of the year. If you are going to feed steers you must feed them judiciously, and make the best use of every ounce of feed you give them and as I take it, the way to make the best use of the feed is to make it appetizing. No matter what class of animals you are feeding the prime consideration must always be to give the feed to them in a palatable form so that the animals eat it, not because they feel that they need it, but because they like it, and they would like to have a little more. Until a man learns to feed in that way he is not a good feeder and he does not feed properly no matter what it is he is feeding, be it a boy or a big steer. He must learn to feed so that the animals like the feed. The first thing is to give them something juicy. It is impossible to feed steers profitably in Ontario to-day without having some succulent feed to make up part of the ration. Turnips, mangels, sugar-beets, ensilage, are all good. We have tried all kinds of ensilage and roots, but a combination of the different succulent feeds is best. A preparation of corn-ensilage, roots and straw will give you first-class results with a pound of meal a day to start with. A man who is going to make a success of steer feeding must start them well at the beginning; must shove them right ahead and keep them going, if he does not he is making a mistake. To give them the right kind of a beginning ration he must give them something extremely succulent, say ensilage or roots or rape. Rape will stand quite a bit of frost and so may be cut and fed quite late in the season. Roots improve with keeping. Ensilage does not materially change and may be fed even more advantageously later on, because roots lose in weight although they improve in quality. Now get this succulent ration into them for the first month and unless you are catering for the Christmas market, give them no meal the first month, just give this succulent ration and they will eat it freely, and you will be astonished at the gains they will make. I have seen steers make 100 pounds in two weeks, incredible as they may seem. Last fall we had steers that made 70 pounds in two weeks and they went ahead the next two weeks and made good gains. Quick gains and cheap gains are the gains that will make the money for you, because there is a certain maintenance ration that you have got to feed and what you can persuade them to eat over and above that is the feed that makes the gain.

Start off with a little meal. Do not start off with cornmeal or gluten or wheat or barley or peas. Start in with something light. Mix up equal parts of oats, bran and barley. The steer's digestive organs are not in a condition to fully utilize a heavy meal; therefore, I say, start in with something light to get them going and gradually increase it until at the end of a couple of months, or say three months, they should be getting three or four pounds a day.

We fed No. 2 frozen wheat to one bunch and we found that we were not making good gains, not as good as they were on gluten and bran, and we had to increase the quantity of frozen wheat very materially. It does not seem to have the nutritive value that other grain has. It seems to be quite palatable,

but not so valuable as a food. When we did increase it by a pound a day we got about as good results as we did from gluten and bran. I think a man who is feeding for about six months should never feed more than eight or nine pounds of meal a day,and that daily ration should be fed during the last month only. He should start in and gradually increase until he ends up the last month with that quantity of meal, and that should be largely cornmeal or gluten or oil meal, or if feeding barley and oats or peas and oats add a small amount of oil meal to the ration during the last month and that will give you more satisfactory returns. There is nothing quite so good as a little bit of oil meal to put on the finish.

A good ration for a steer from the begining to the end of the fattening period, is a half-pound of bran or a very little meal; the first week on meal, that is after he has been fed three or four weeks on the roughage ration alone. The second week increase to 1½ pounds; third week 2½ pounds; fourth week 3 pounds; fifth week 3½ pounds, and then keep on increasing gradually, say ½ pound more each week, until you find him slacking up a little in gain, when give him another boost of a couple of pounds a day so that at the end of the fourth month the steers should be getting seven pounds a day, and the last month I would give him from eight and one-half to nine and one-half pounds a day, and the last pound of that would be oil meal. By oil meal is meant the flax seed after it is ground and the oil pressed out or taken out by a chemical process. It is ground up into nice fine meal. Oil cake is the same thing before being ground.

Q.—Have you tried feeding ground flax?

A.—Yes, but it costs three cents a pound, and we cannot afford it.

Q.—We can buy it for $2.60?

A.—We do not grow it down here. I like flax for calves and little pigs. It won't give any better results for steers or cows than oil meal and is very much more expensive. Flax is certainly a good thing, but I object to it on account of the cost.

Q.—Do you prefer nutted oil cake or ground?

A.—Nutted oil cake is better, there is less danger of adulteration. Some people have the habit of letting animals they are feeding for the market be at a standstill for a month or two months at a time. Feed that is given to an animal at a standstill goes for nothing; there is no cash return for it and I think it is an absolute loss. I do not see why a man should keep an animal standing still, if there is any possibility of going ahead at all. You can feed steers at a profit for a time if you feed them properly. The well-bred and well-fed steer is always a profitable animal.

Q.—Do you let steers out for exercise?

A.—Not in winter. They are in box stalls and they do very well indeed. We expect them to make about two pounds a day. I put in a bunch last June and fed them right through, and in 145 days they made something like three hundred pounds. When they are doing that they are doing all right.

Q.—What would the feeding cost?

A.—I haven't figured out the cost yet. They ate about 800 pounds of meal each, ensilage, roots and clover hay. I estimate they cost us about twenty dollars to feed, and they brought us about sixty dollars a piece. They cost in June twenty-five dollars. Ten steers loose will give you more pounds of gain for a dollar's worth of feed than ten steers tied. That is why I say, give them all they will eat. If you can persuade a steer to eat more by letting it loose, then, let it loose.

Q.—That would be a slight argument, I suppose, for a bit of exercise for a steer that is tied up?

A.— Possibly. You know yourself you don't always eat as hearty a dinner every time, sometimes you have off days; while the other fellow has an on day, and makes good use of the food. If you are feeding them in stanchions you give them a certain quantity of meal and they eat it up clean.

Q.—You cannot turn steers loose without dehorning them?

A.—That is a very small matter. We dehorned twenty-nine the other day in a very short time.

THE COLONY HOUSE—AN ECONOMICAL AND EFFECTIVE PLAN OF HOUSING POULTRY.

By F. C. Elford, Manager Poultry Department, McDonald College, Ste. Anne de Bellevue, Que.

This address was also delivered at the Winter Fair, and is reported on page 48. Discussion at Eastern Show.

Q.—Do you approve of a wooden floor?

A.—We have a wooden floor in this house, and I approve of them for this reason, we can move the house from one place to another. If we want to move the house in the morning we simply shut this little door the night before, hitch a team to the house in the morning and take it to where it is wanted. It is a single board floor and we bank the building in the fall with snow.

Q.—Do you approve of a coal-ash floor?

A.—It is all right if it is dry.

Q.—Have you any ventilation besides the window and the door?

A.—The window and the door, and then the door in the gable is open frequently.

Q.—Does your screen go all the way across where they roost?

A.—It is made of twilled cotton, there is nothing except the cotton between them and the outer house, and if you put a thermometer where the hens are and one outside the curtain it will give a difference of from eight to twelve degrees.

Q.—Does the curtain roll up, or is it on a frame?

A.— It is on a pulley and you can roll it up as quickly as a window blind.

Q.—Are these windows glass or canvas?

A.—Glass, and they slide back.

Q.—Have you any canvassed windows?

A.—I have, but I do not like them. I had canvas screens on a number of these windows, and I am going to take them down, I do not say because I do not like canvas windows that they are no good, but I say that they do not suit me. I find that after my canvassed window goes down the house is chilly and dark and the hens do not like it, it will let in a little more fresh air, but my windows can be easily opened and if it is too cold I would rather have the windows shut than to have the canvassed window.

FINANCIAL STATEMENT OF THE EASTERN ONTARIO LIVE STOCK AND POULTRY SHOW.

To December 31st, 1907.

RECEIPTS.

Cash on hand January 31st, 1907, as per last report	$3,541.64
Legislative Grant for Show of 1908	4,100.00
Entry fees	1,150.78
Gate receipts and Farmers' Institutes	330.15
Sale of carcasses and hides	1,375.06
Sale of live birds	116.00
Davies, Limited, special prizes	25.00
Canadian Ayrshire Association, special prizes	14.00
Holstein-Friesian Association, special prizes	45.00
Shorthorn Breeders' Association, special prizes	100.00
Special cash prizes	71.00
Advertising space in building and prize list	90.00
Eastern Ontario Sales Association, expenses of sale	35.00
Charges collected for protested cheque	1.57
Telephone call	.15
	$10,995.35

EXPENDITURES.

Directors' Expenses	$174.70
Postage and Stationery	110.55
Printing and Advertising	602.05
Office Help and Expenses at Show	308.75
Shipping coops, Guelph to Ottawa	22.49
Telegraph, telephone, miscellaneous express	30.60
Judges and Lecturers	305.05
Superintendents and General Help	500.85
Expenses of Block Test	62.00
Prizes	3,929.25
Sale of Carcasses	1,378.41
Sale of Live Birds	117.50
Freight Refunds	195.10
Reporting Meetings	75.00
Straw and Feed	80.91
Lighting Building	125.40
Heating Building	185.48
Hardware, lumber and shavings	62.72
Cups for Poultry Coops	10.78
Dairy Testing, two years	25.00
Auditor	9.00
Miscellaneous	3.57
	$8,315.16
Balance cash on hand	$2,680.19

Examined and found correct, this 17th day of March, 1908,

(Signed) J. M. DUFF, Auditor.

(Signed) J. C. SMITH, President.

(Signed) A. P. WESTERVELT, Treasurer.

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W. A. Wallace, N. F. Wilson, R. Richardson, John Campbell, R. R. Sangster, Lancaster; Geo. Bradley, Carsonby; John Barr, Dunmore.

Committee on Swine.

D. C. Flatt, J. C. Smith, J. H. Grisdale, P. O. Collins, David Barr, Jr., Renfrew; W H. McNish.

Dairy Committee.

W. F. Stephen, J. H. Grisdale, N. Sangster, Ormstown, Que.; W. H. McNish, Jos. Meilleur, Ottawa.

Committee on Poultry.

John A. Belford, A. W. E. Hellyer, Geo. Higman, F. J. Blake, Almonte; Geo. Robertson, Ottawa; W. F. Garland, Galt E. Brown, Pt. Fortune, Que.; D. McKellar, Hawkesbury.

Committee on Seeds.

Geo. Boyce, T. G. Raynor, B. Rothwell, F. Bradley, J. C. Stuart, G. H. Clark, L. H. Newman.

Reception Committee.

Peter White, His Worship the Mayor of Ottawa, Ald. Rosenthal, Fred Cook, Geo. Higman.

ONTARIO HORSE BREEDERS' ASSOCIATION.

ANNUAL MEETING.

The annual meeting of the Ontario Horse Breeders' Association was held in the Walker House, Toronto, on February the 13th, 1908, beginning at 8 p.m. The President, Wm. Smith, occupied the Chair.

The Secretary read the minutes of the meetings held in connection with the organization of the Association. He also read the Constitution that had been adopted for the Association.

Moved by Peter Christie, seconded by J. M. Gardhouse,—"That the minutes as read be approved and adopted." Carried.

REPORT OF THE EXECUTIVE.

The Secretary then read the following report of the Executive to the members of the Association:

Immediately after the Association was formed a committee waited upon the Hon. Nelson Monteith, Minister of Agriculture, to report the organization of the Ontario Horse Breeders' Association and to inform him as to the preparations being made for holding a show. The committee asked for a grant of $2,000 to assist in the work. This amount was afterwards received from the Ontario Government and the Dominion Government gave a grant of $200 towards the prize list.

Arrangements were then completed for holding the Show in the St. Lawrence Arena, Toronto, on February the 20th, 21st, 22nd, and 23rd, 1907. The Show was very successful in every respect. The majority of the classes were well filled, and a large number of farmers and breeders, and others interested in horses, were present from all parts of the Province. The gate receipts amounted to over $700, as compared with $300 received in gate receipts at the Clydesdale and Shire Show the previous year. The following table shows the breeds represented in the classification for the Exhibition of 1907; also the number of entries in each breed and the amount of prize money offered:

Breed	No. of entries	Amt. of Prize Money
Clydesdales	75	$765 00
Canadian-bred Clydesdales and Shires	26	340 00
Shires	11	285 00
Hackneys	25	360 00
Standard-breds	8	*465 00
Thoroughbreds	9	365 00
Ponies	9	130 00
Heavy Draught Horses	10	180 00
	173	$2,890.00

On October 23rd last a meeting of the Directors was held in Toronto, and it was decided to hold the Show for 1908 on February 12th, 13th and 14th, 1908. The principal changes made in the classification are as follows:

1. Separate sections in the class for Canadian-bred Clydesdale and Shire Stallions, four years old and over, and for stallions three years old.

2. A section for Hackney fillies, three years old and over.

*This amount includes $100 special prizes.

3. Two sections for Standard-bred stallions foaled previous to January 1st, 1905, were made into one section.

4. A section was added for Standard-bred fillies, three years and under.

5. A section was added for single Draught horses, geldings or mares, shown on a line, bred in Canada and the property of persons actually engaged in farming or agricultural pursuits only.

On November 13th, the Directors waited upon Hon. Nelson Monteith, Minister of Agriculture, and asked that the Government Grant to the Association for 1908 be increased to $3,000. The Minister expressed his appreciation of the work being done by the Association, and although the estimates for the present year have not yet been laid before the Legislature, the Directors believe that the amount of the grant for 1908 will be increased over that of 1907.

During the past summer the Department of Agriculture issued a report of the special investigation of the horse industry which was conducted in the fall of 1906. This report has received the careful consideration of the Directors of the Association. Meetings for the purpose of discussing the horse industry were held on October 23rd and November 13th, 1907. The Directors undertook to make suggestions, which, in their estimation, would be of benefit to the horse industry of the Province, if they were adopted. These suggestions were printed and submitted to a large representative meeting of farmers and horse breeders at the Provincial Winter Fair last December. The meeting adopted the suggestions practically as they were submitted. The Directors met again on January the 3rd, to further discuss the situation and some further suggestions were added to those submitted at the Provincial Winter Fair meeting. At the Eastern Ontario Live Stock and Poultry Show, the farmers of the eastern part of the Province were given an opportunity to discuss the suggestions and express their views upon the needs of the horse industry. Those present at the meeting considered that the suggestions of the Directors were along the proper line. The members of this Association should now state if these resolutions meet with their approval and what action should be taken at the present time.

1st.—Whether or not it should be urged that legislation covering these points should be passed at once.

2nd.—Whether it would be better to have an Act drafted and request the Department of Agriculture to arrange a series of public meetings, in the various counties of the Province, for the purpose of discussing the proposed Act and explaining it, with the object of having all the clauses thoroughly understood before asking that legislation be passed.

The following are the resolutions as finally passed:

1. That there should be restrictions placed on the use of stallions.

2. That only pure-bred and registered stallions should be allowed to stand for service, except:

   (a) That owing to one-third of the stallions in the Province being found by the Inspectors to be unregistered, that for three years grade stallions known to be good sires, and upon inspection found to be of good conformation and free from hereditary unsoundness, should be granted a license to be known as "Class Z."

3. That all stallions standing for service should be free from hereditary unsoundness.

4. That no horse having any of the following diseases should be given a license: Bone Spavin, Curby Malformation of the Hock, Boggy Malformation of the Hock, Ring Bone, String Halt.

5. That all stallions standing for service should reasonably comply with the standard of conformation for the breed which they represent.

6. That stallions should be inspected and that those complying with the above requirements, except those provided for in Section (*a*) of resolution 2, should be given a license to be known as "Class 1."

7. That there should be three Inspectors for each district, appointed by the Government. If the three Inspectors are unanimously in favor of refusing a license there should be no right of appeal against their decision. But in case the Inspectors should not be unanimous the stallion owner should have the right to appeal from their decision and to have an inspection by a board of appeal appointed by the Government for that purpose.

8. That all inspection should be made between October 15th and March 15th of each year, and that all licenses should be good for one from the 15th of March following the date of Inspection.

9. That no person should be allowed to accept a service fee for any stallion unless a license has been taken out for said stallion.

10. That all printed matter advertising any stallion should include a copy of the license certificate issued for such stallion.

11. That the license fee should be $10, out of which the expenses of the inspection should be paid and that the surplus collected from each County should be returned to the County to be used for the encouragement of Spring Horse Shows, no more than two of which shows should be held in any electoral district.

12. That local Horse Show Associations should be encouraged in each County; that the Spring Horse Shows should be held under the management of these Associations and that these Associations should be affiliated with the Ontario Horse Breeders' Association.

13. That educational meetings should be held in connection with the Spring Horse Shows held in each County, by arranging to have special lectures on practical subjects relating to the horse industry.

14. That "syndicating" under the generally accepted meaning of the word, should not be encouraged and that some legislation should be passed to regulate it.

FINANCIAL STATEMENT.

To December 31st, 1907.

Receipts.

Legislative Grant	$2,000.00
Dominion Government Grant	200.00
Ontario Jockey Club Grant	100.00
Canadian Horse Show Association	50.00
Hackney Horse Society, Grant	75.00
Canadian Clydesdale Association, Grant	700.00
Canadian Pony Society	25.00
Canadian Shire Association Grant	50.00
Toronto Driving Club Grant	50.00
Advance by Canadian Horsemen's Association	2,000.00
Clydesdale Association, on account of memberships	100.00
Entry Fees	396.00
Advertising in Prize List	25.00
Sale of Catalogues (Net)	36.30
Gate Receipts	710.80
Special Subscriptions	297.00
	$6,815.10

Financial Statement, Ontario Horse Breeders' Association, continued from previous page.

EXPENDITURES.

Repayment advanced by Canadian Horsemen's Association		$2,000.00
Building,		
Seating and Platform	$697.25	
Sand and Shavings	77.90	
Superintendent and help, including door keepers	282.36	
Cartage on Chairs	19.00	
Lighting and Heating	184.64	
		1,261.15
Directors' and Committees' Expenses		104.00
Printing and Advertising, Rosettes, etc.		508.25
Judges' Expenses		163.00
Band		194.00
Prize Money, including silver cups		2,517.00
Interest		10.85
Commission on advertising prize list, 1908		40.75
Office Help		30.00
Miscellaneous		14.95
		$6,843.95
Balance due Treasurer		$28.85

Examined and found correct, this 31st day of January, 1908,
(Signed) J. M. DUFF, Auditor.

All of which is respectfully submitted:

(Signed) WM. SMITH,
GEORGE PEPPER,
JOHN BRIGHT,

(Signed) T. A. GRAHAM,
J. M. GARDHOUSE,
A. P. WESTERVELT.

In the course of a short address the President stated that a few years ago the horse breeders of the Province felt that their interests were not sufficiently represented and protected in the management of the Spring Horse Show. Not that there was any feeling against that particular body, but it was considered that the breeders should have a separate organization controlling a horse show of their own. How this could be best brought about caused many an anxious hour to those who were interested in the organization of this Association. In framing the Constitution it was felt that it should be so worded as to preserve the identity of the Association as an organization of horse breeders. The most drastic clause of the Constitution in this respect is that restricting membership in the Association to such members of affiliated pure-bred horse associations as have recorded at least one pedigree as importer or breeder during the preceding calendar year.

It will be generally conceded by all who attended our last show, that it was fairly successful. The City of Toronto has shown a lack of consideration with regard to the show. Many promises have been made in the past with regard to providing an arena to properly accommodate such exhibitions as ours, but up to the present time nothing has been done.

During the past year the Directors have given much attention to the Government's report of the investigation of the horse industry in Ontario. From one end of the Province to the other there is a unanimity of opinion that something should be done for the improvement of horse breeding. At the public meetings held during the investigation, the commissioners were instructed that the discussions should be perfectly open and that they should do nothing to influence decisions in one direction or the other, yet we find that the reports of the different commissioners are practically the same with

regard to some action being taken to control breeding. The meetings at Guelph and Ottawa were also in unison with the reports of the commissioners. It has now to be dicided what the next step should be. We generally recognize that no Government should bring forward legislation too far in advance of public opinion. It is possible that the Legislature will take a step forward which will bring out fully expressions of the feelings of the people.

Moved by Mr. SMITH, seconded by THOS. GRAHAM, "That the report of the Executive be adopted without the suggestions and resolutions on the horse industry." Carried.

The resolutions were taken up clause by clause. Clauses 1 to 7 were adopted. Clause 8 was amended to read as follows: "That all inspections should be made between October 15th and March 15th of each year, and that all licenses should be good for one year from the 15th of March following the date of inspection. In case it is necessary to inspect a stallion between the 15th of March and the 15th of October of any year, the license will expire on the 15th of March following." Clauses 9 to 14 were adopted.

In discussing the suggestion as to what should be done regarding legislation, Mr. Pepper said that the present was an opportune time to have an Act passed. In his opinion the next few years would see a great demand for horses and every inducement and encouragement should be given farmers to breed more and better horses.

Moved by Mr. PEPPER, seconded by R. E. GUNN, "That the first suggestion be passed."

Mr. HENDERSON reminded the meeting that there would soon be a general election in the Province and he did not think the government would wish to pass the required legislation at this time. Mr. Bright believed the desired legislation to be very radical. The time already spent in discussing it had been educational and had done much good. This educational work was wearing down opposition and was preparing the people to accept such a license act as it is considered the Province requires. Mr. Christie wished the breeders to express their views irrespective of party politics, and not look at the business from a political standpoint. There is need to raise the standard of horses in the Province and the sooner the Act was put in force the better it would be for the horse industry.

Moved in amendment by Mr. Henderson, seconded by Mr. Bright, "That suggestion 1 be struck out and suggestion 2 be carried."

On a vote being taken the amendment was lost and the original motion carried.

The election of Directors resulted as follows:

Canadian Clydesdale Association: Wm. Smith, Robert Graham, John Bright, Fred. Richardson, Jas. Henderson, W. Renfrew, A. G. Gormley, R. E. Gunn.

Canadian Shire Association: J. M. Gardhouse, John Gardhouse.

Canadian Hackney Society: John Boag, E. C. H. Tisdale.

Moved by J. M. Gardhouse, seconded by John Bright, "That we request the Honorable, the Minister of Agriculture, for the Province of Ontario, to enact such legislation as will permit a provincial license to be issued to auctioneers to sell registered live stock at any point in the Province."

R. E. Gunn presented to the meeting the following motion which had been passed at the annual meeting of the Canadian Clydesdale Association:

"That the Clydesdale Association of Canada unanimously appoint a committee to place a resolution before the Ontario Horse Breeders' Association, to the effect that the Ontario Horse Breeders' Association, their executive or committee appointed by them, meet the Provincial Winter Fair Board of

Guelph, to discuss the advisability of having an amalgamation of all the breeding associations of Canada to enquire into the advisability of moving the Provincial Winter Fair from Guelph to the Union Stock Yards at Toronto Junction, where, in the unanimous opinion of the Clydesdale Association, a combination or amalgamated show can be held, including the breeding classes of all the various kinds and breeds of live stock, thus advertising not only the fat stock and poultry interests of the Province, but all the breeders of every line of live stock throughout the country."

This matter was left to the new Board of Directors to act upon.

DISCUSSION AT THE ONTARIO PROVINCIAL WINTER FAIR, 1907, BASED ON INFORMATION AND SUGGESTIONS CONTAINED IN REPORT OF INVESTIGATION INTO THE HORSE BREEDING INDUSTRY; ALSO A NUMBER OF POINTS SUGGESTED BY DIRECTORS OF THE ONTARIO HORSE BREEDERS' ASSOCIATION.

In opening the meeting, Hon. Mr. Monteith, Minister of Agriculture, who acted as Chairman, said: "It is not quite time to commence the meeting, but I know you are all anxious to hear this question discussed. The stock breeders of Ontario are all anxious to point the way that legislation should trend, and we look upon this as the farmers part of it. We believe we can get a fairly accurate idea of the trend of agricultural views at this great gathering. We are here this afternoon to discuss questions that may mean much in the future to the stock breeders of this Province and we will ask that those who speak on this question and ask questions this afternoon will be brief and concise, boil it down and put it in a few words, because, after all brevity is something we should aim at.

"Horse-breeding is not confined to any particular set of men. The great bulk of the farmers of this Province are horse-breeders and we want to get the views of the great majority of the farmers of this country on the questions which are raised in this set of resolutions. The matter of license inspecting, and a great many other things are taken up, and we ask you to discuss them intelligently and to the point. Mr. Gardhouse has kindly consented to lead in the discussion on the points raised in this set of resolutions, and I will call upon him to address you."

John Gardhouse, Highfield: I am sorry that Mr. Smith is unable to be present and I want to tell you I will not be able to fill the gap as I would like to on this occasion. This is a very important matter, a matter that should be met fair and square in the face and one that requires a good deal of foresight and judgment.

You have a number of resolutions. The Board of Directors held several meetings and discussed this matter from every side and these resolutions are the decision that the Board came to. I will read over these resolutions for the benefit of those of you who may not have had an opportunity of seeing them before, and we will then take them up clause by clause.

I. That only pure-bred and registered stallions should be allowed to stand for service; except:

(a) That owing to one-third of the stallions in the Province being found by the Inspectors to be unregistered, that for three years grade stallions known to be good sires, and upon inspection found to be of good conforma-

tion and free from hereditary unsoundness, should be granted a license to be known as "Grade 2."

2. That all stallions standing for service should be free from hereditary unsoundness.

3. That all stallions standing for service should reasonably comply with the standard of conformation for the breed which they represent.

4. That stallions should be inspected and that those complying with the above requirements, except those provided for in Section (*a*) of resolution 1, should be given a license to be known as "Grade 1."

5. That no person should be allowed to accept a service fee for any stallion unless a license has been taken out for said stallion.

6. That all printed matter advertising any stallion should include a copy of the license certificate issued for such stallion.

7. That the inspection should be done by a County Inspector or Inspectors, appointed by the Government.

8. That the license fee should be $10.00, out of which the expenses of the inspection should be paid, and that the surplus collected from each County should be returned to the County to be used for the encouragement of Spring Horse Shows, no more than two of which shows should be held in any electoral district.

9. That local Horse Show Associations should be encouraged in each County; that the Spring Horse Shows should be held under the management of these Associations and that these Associations should be affiliated with the Ontario Horse Breeders' Association.

10. That educational meetings should be held in connection with the Spring Horse Shows held in each County, by arranging to have special lectures on practical subjects relating to the horse industry.

11. That "syndicating" under the generally accepted meaning of the word, should not be encouraged and that some legislation should be passed to regulate it.

These questions are now open for discussion and we ask that you should feel free to discuss them and ask any questions you wish, but do not try merely to get up a discussion that is of no value. I think we will take up resolution "1." There are some fairly good horses that are not registered who have proved themselves to be very good sires, and the Directors thought it would be well to allow three years.

ARTHUR JOHNSTON: We, as a Board of Directors, thought we were more likely to get representation from the whole Province here than at any other time, without a very great deal of expense and I may say we did not intend this meeting of horse-men for the purpose of making a few set speeches. We did not intend that distinguished politicians or horse-men should monopolize, or even take up the greater part of the discussion. You are the speakers, it is in your hands, it is a parliament of horse-breeders of the Province of Ontario.

Q.—What proportion of these unregistered stallions were eligible for registration?

A.—I cannot tell you that, but I suppose practically a very small percentage, probably none of them that could be registered. In the district where we were, I doubt if there were any of them that are in that report as grade stallions, that would be eligible for registration.

Q.—If a horse has good conformation and is sound, how do they claim to know it is free from hereditary unsoundness?

A.—Pretty hard job to know that he was not, I guess. I suppose the only way you could tell would be by knowing the sire and dam and granddam

and grandsire, and knowing that these were either unsound or sound. If they were unsound then you may come to the conclusion that the horse you were inspecting was not free from hereditary diseases.

ALLAN CHURCH: That question is unnecessary altogether. If you read "A," it does not say the horse is free from hereditary disease and sound.

Mr. GARDHOUSE: If that horse was of good conformation and sound, I think the inspectors would pass him without further consideration.

JOHN BRIGHT: It does not say that we are going to go back to find out whether his ancestors were sound or not, it means he has no blemish on him that is hereditary: nobody proposes to go back into the ancestors to find out whether the ancestors were unsound or not, if we find the animal sound, we do not expect that his ancestors were unsound.

H. W. COOK, Streetsville: Hon. Mr. Monteith and Gentlemen, I agree with very many of these resolutions. My experience as a close observer and a horse-breeder is that there are many horses that are not registered that are most excellent stock getters. In the County of Halton, where I live, looking back over a number of years, I know that we have bred from a number of horses in the past and there was scarcely a registered horse in the County, and it was easier for the horse buyer and horse speculator to go around and pick out a good carriage team a few years ago than it is to-day. The objection I take to the resolution is simply this. Take a horse that won't register and you spread a mantel of straw around him and you throw a mantel of tinsel around the registered horse by grading one as number one and the other as number two. If there is a horse in this Province that is known to be an excellent stock getter and if he is a beautiful horse, and if his outlines are pretty nearly perfect, why should that horse be called grade two. I am a little afraid that there is an object in this thing. There are a good many men importing horses and I admire their progress, but my own experience is that there are too many of these registered horses that are not good stock getters. We had a horse in Halton that is not a registered horse, but he was an excellent stock getter and we had another horse called Gold-Leaf, and would not it be an injustice to call it grade two and to call another horse that was inferior, grade one. I have no objection to the Horse Breeders' Association going very far. They should not allow a horse that has a blemish on him to go out, but I think it is somewhat of an insult to the intelligence of our Canadian farmers to say "Gentlemen, you do not know what horse to breed to." Abraham Lincoln said, "Always trust the people," and I think we might say here to-day "Let the Government trust the people." We claim that Canadians are intelligent and are horse men, and they have been breeding horses for years and surely the intelligent Canadian would not breed to an inferior horse. I have to admit that there are some that do, but I think we should be cautious about going too far in this line, and where a horse is known to be a good stock getter and of good conformation and rather a perfect horse, you should not brand him as grade No. 2.

Mr. COOTES: We had a horse in our district that never left a good colt and another horse that left poor stock. We had another one called "Forest," that was not registered. We have had a great many good horses in the County that were never registered and other horses that were registered that should not have been allowed in the county. I think we should cut out the unsound horse.

J. H. CLARE: Does this term Grade 2 really mean anything against the horse or is it merely meant to place a distinction between registered horses and horses that are not registered? There are a great many horses around the country that are not registered; how are we to know it if there is not

some distinction placed on that horse so that the public will know immediately whether that is a registered horse or not? In my opinion the Horse Breeders' Association mean that just as a distinction to show the people the standard the horse really has.

Mr. GARDHOUSE: That is just exactly what that Grade 2 is, to distinguish between the horse that is registered and the horse that is not. They must both comply with good conformation.

Mr. WATT: Would not it be well to put in the word "registered" before registered horses and "unregistered" before unregistered horses?

Mr. COOK: Every registered horse has a number, every unregistered horse has no number.

Mr. HENDERSON: Now there is only one book to register in and it is kept at Ottawa, and it is strange to see that a number of them are not registered.

Mr. INNIS: The registering is made in Ottawa and unless it is certified from Ottawa it is not regular, and these numbers that are not from Ottawa should not be recognized.

Mr. GARDHOUSE: That is quite correct, Mr. Innis, the registered animals are registered in the various Stud Books of Canada. They are the recognized Stud Books and the National Live Stock Registers are now kept in Ottawa.

JOHN BRIGHT: I move the adoption of clause one, and in moving its adoption I would say that to conform with the ideas of my friend, Mr. Cook, in not cutting off some horses, it was thought best to extend the time and give them a permit, and it will not be very long before that will be out of date. I think we were unanimous as breeders throughout the country that no grades should be used. Some gentlemen said they got better stock from grades than pure breeds. All I have to say is, the pure-bred horses must have been very poor. We have an example of the benefit of using pure-bred sires in this show and at Chicago. Did you ever find one of these gentlemen who have been successful in a show using a grade? Go to Scotland, did the breeders there work up their reputation by using grades? No, sir, they used the best pure-breds with the best pedigrees they could get, and so we came to the conclusion that a grade should not be used in this country.

Mr. WATT: I move an amendment, that the clause read like this, "Whereas one-third of the stallions in the Province have been found by the inspectors to be unregistered, (omitting the words for three years). That grade stallions known to be good sires and upon inspection found to be of good formation and free from hereditary unsoundness, should be granted a license, and after that unregistered, marked unregistered.

Mr. J. GRAVE: I have much pleasure in seconding that motion.

Mr. COOK: I could have mentioned the whole Royal George family, Prince George, who sent stock to Toronto Exhibition, and took prizes year after year. Supposing a man was to breed to an unregistered horse and found he was getting good stock, don't you think it would be an injustice to say to that man, you must not breed to that horse any more? I second that gentleman's amendment.

Q.—Are we to understand the scheme of licensing is to be indorsed?

The CHAIRMAN: This resolution really deals with that. It is the kernel of the whole thing.

Mr. GRAY: I had the honor to be appointed one of the inspectors last fall in the eastern part of this Province, and we found things very unsatisfactory. We found two registered stallions in six townships and we found some very inferior horses, and in one part of the country they had an

imported Clydesdale horse and the results were very satisfactory, but they were keeping their colts and using them. Then we came up into Lanark County and everybody told us that when we saw a certain horse there we would see a cracker-jack. We found that horse and he was a good-looking horse, lots of bone and action and fair formation, but when we came to put our hands on that horse he had two of the worst side bones I ever saw, and that is where the license law would shine. If the license law was in force that horse never would have been brought out here, and we found two or three others that never should have left the Old Country.

GEORGE PEPPER: There are two questions raised by that motion. One of the members said there were a number of horses that did good, horses that were unregistered and if these horses were living to-day I have no doubt they would be eligible for registration. One of the horses he speaks about was no doubt registered in the United States.

As to striking out the words "three years." Let me say to this gentleman that when the Directors of the Ontario Horse Breeders' Association discussed that very fully they thought it best to put in a limit of time of three years and by that time they would have had some experience, and then if they found it necessary to take care of the horses he has reference to, they could extend it for a further period.

Mr. WATT: That is unsafe legislation.

ROBERT MILLER: I have never owned a pig, and I have never owned a chicken except when I bought it to be sent to some other man, but while I am a sheep-breeder, I take equal interest in breeding horses, and I can tell you that when you undertake to discuss this question, until you have all arrived at one conclusion that will be satisfactory to you and to the breeders throughout this country, you have undertaken a very great piece of work indeed. It is impossible to satisfy everybody. The moment you start out in the country you will find obstacles that will be hard to get over. I am of the firm conviction that you cannot pass very stringent laws to control the breeding of horses throughout this country. I have no fear but what the breeding of horses is advancing and that more progress is being made in this country. I have attended a good many Farmers' Institute meetings, a great change has taken place. We heard Mr. Gardhouse this morning give one of the best descriptions of what should be a good horse that I have ever heard from a public platform, and then we heard Mr. Beck make the best speech I have ever heard him make, and I have heard him make good speeches on several different occasions. He told you of the splendid work the horse-breeders of this country had done in competition with horse-breeders in other countries.

My simple opinion as to the licensing of stallions is that you must not charge too large a fee. If the Government of this Province cannot afford to pay inspectors to go out through the townships to do that work, then you should collect a small fee from those who have their horses inspected, and it should be just as small a fee as it is possible to take from them. I say, any man that likes a horse better than any other ought to have a right to use him if he wishes to, but the moment he takes a fee for it then he ought to have published right at the door of his stall what that horse is. It should not be possible for any owner to deceive any man who comes to patronize his horse. I am not much of an expert in manipulating pedigrees. It has always been my effort to keep pedigrees straight, but I could take a pedigree and manipulate it so that 90 per cent. of the men that read it would not know whether the horse was registered or not. I say that these inspectors should write the simplest story that it is possible to write, and they should say "This horse is a registered Clydesdale or a registered Hackney, or a registered

Shire, or this horse is not registered, he is unregistered, he is a grade," so that it would not be possible that any man would be deceived.

W. A. McKenzie, Mitchell: Are these inspectors to dictate to us and tell us what horses are suitable for us to breed from. I would like to know if we are not capable of knowing what is the best horse. Are you going to send a man from the city to tell us the kind of horse we are to use? How often does a veterinary come out to look at your horse; he will look at his mouth and feel his pulse and he will ask you if he has been on grass, and if you say he has been on grass he will say that is what made him sick, and if you say he has not been on grass he will say that is the cause of it. That man will probably tell you he has only had one case of this kind since he started in practice. I have had men tell me that in my own stable, and I have had that horse in the plow the next day. Canada is coming to the front, and yet they will turn around and insinuate to us that we do not know how to breed.

Mr. Bright: What we do think is, that stallion owners should be honest with their customers; they should advertise their horse as grade, if he is a grade. We do not propose to tell the farmers what horses they should use, but we simply want to say a horse is registered or he is not registered. Some owners call a horse a pure-bred and when we come to ask for the certificate we find he has never been recorded, and we found it was impossible to record the horse.

Q.—Who has a right to vote on this question?

The Chairman: We are not legislating, it will have to pass through finer crucible than this before it passes into law. It is largely to get an expression of opinion from those who are here. It strikes me these resolutions do not cover the whole ground. It appears to me that you are almost compelled to accept licensing without being able to say "yea" or "nay." I think we have erred in starting out and at first we should decide to accept licensing as a principle or not, and then we can discuss the question.

Thos. McMillan: I am glad you made that point. This discussion is for the purpose of serving some useful purpose in guiding the Minister of Agriculture when he comes to make the law, and the first question for us to decide is the principle of licensing.

The Chairman: If you are willing to waive your motion and if this gentleman will withdraw his amendment we will give the other question precedence.

The motion and amendment were withdrawn.

The Chairman: Now you have the question before you to take up that feature of it, and I think that is possibly the best thing to do.

Mr. Cook: I am heartily in sympathy with most of the resolutions of the Horse Breeders' Association but I am not in sympathy with this resolution. It is a monopoly of the Horse Breeders' Association and we do not want that, there are a few men who want to monopolize the whole thing. I would be willing to strike off every bad horse, but leave the good horses. I am not a member of the Horse Breeders' Association, but I have taken a considerable number of prizes at fairs, and I think I know a good horse when I see it.

Mr. Pepper: According to the report of the inspectors there is less than 10 per cent. of the number of stallions unsound and those are the only ones that would be struck out. There are 2,500 stallions and about 10 per cent of those are unsound. There is 6 per cent. of the pure-bred registered horses unsound and about 12 per cent. of the grade horses, so that you would not be affecting very many people.

The CHAIRMAN: You will notice, in clause 5 it says "That no person should be allowed to accept a service fee for any stallion unless a license has been taken out for said stallion."

Mr. PEPPER: I move, seconded by Mr. Johnston, that we ask the Government to enact a license system and that clause 5 be the ground work of that license system.

The CHAIRMAN: It is moved and seconded that clause 5 stand.

Mr. COOK: That strikes off quite a number of horses; if they do not choose to take out a license, they should yet have the right if the people come to their stables.

W. S. FRASER: We started out discussing the first resolution, and now we are discussing clause 5. There are two ways of dealing with this question, one is by legislation and the other by education. We have had a series of meetings in this place as well as throughout the Province with the view of educating men along the lines of stock raising, and I think the gentlemen here will bear me out when I say that it has been with a measure of success. If it had been brought up here some years ago, that no man was to use anything but a bacon hog, I am afraid it would not have been acceptable to the people. I think the most persuasive way is by education, and if no one else moves an amendment to this resolution I move that the matter be discussed here, with a view of whether it is better to legislate in this matter or educate.

Mr. MILLER: I think it should be explained that it is a matter for further consideration as to whether there should be any fee charged, it could be settled in the future whether there should be any fee; you may have license without any fee.

Mr. FRASER: A man might vote for it and find out afterwards he had a fee to pay.

The motion was put to the meeting and carried by a large majority.

The CHAIRMAN: Now we will go back to the first clause. I will put the amendment first.

The motion to adopt clause one was carried.

Mr. JOHNSTON: I have much pleasure in moving that clause 2 be adopted.

The motion was seconded by Mr. Mossip and carried.

Mr. GARDHOUSE: I move that clause 3 be adopted. Motion seconded by Mr. Parnell and carried.

Mr. GRAHAM: I was one of the inspectors last fall, and in going around I found that a good many of the stallions we came across were imported pure-breds or thoroughbreds. We found a number that had first-class pedigrees and yet their formation and quality was absolutely unfit, and this clause that you are now voting on, I think, is a most important one because it will have a tendency to eliminate all horses that have not got first-class conformation and first-class quality to fit them for the pure-bred class.

Moved by Mr. Gardhouse and seconded that clause 4 be adopted. Carried.

Q.—What are you going to do with the horse that is a failure; are you going to allow him to go to another neighborhood and impose on the people there?

Mr. GARDHOUSE: I do not think that has anything whatever to do with the adoption of this clause.

The CHAIRMAN: We do not wish to hurry over it in any slip shod way. We want to give plenty of time for discussion.

Mr. MILLER: I move that the words "grade one," be struck out and "1st Class" be put in its place. I do not think "grade" is a good word to use in describing a pure-bred horse.

Mr. Bright: I think that is a good suggestion.

Q.—Will grade one horses have to be inspected too?

The Chairman: Yes.

A Member: First-class means first-class in the class he is in and it might be misleading. I think if you say class one, it would be better than first-class.

Mr. Watt: I move that the words pure-bred and the word grade be struck out altogether, and pure-bred, with the class that the animal belongs to, put in.

Mr. Gardhouse: I move the adoption of clause "6." The motion was seconded by Mr. Graham and carried.

Mr. McMillan: Should not the printed matters also include his pedigree?

Mr. Gardhouse: The horse-breeders thought this clause "7" out carefully, and they thought there was no better way of having it done; that the inspection should be done by County Inspectors appointed by the Government, and I have much pleasure in moving that clause "7" be adopted.

A Member: I think there will be enough money spent without sending four men to inspect a horse. I think one capable man will do as well. It gives the Government the privilege of appointing half a dozen inspectors.

Mr. Pepper: It was not the intention to appoint two inspectors to do the work of one man. Two inspectors would not go together.

Q.—Cannot one inspector do more than one county?

Q.—Would there be any recourse from the judgment of these inspectors?

The Chairman: It is well to have these matters discussed; these things will have to be dealt with as to whether one inspector should cover a county—that is just a question of the size of the county and the number of horses in the county.

Mr. Cook: A plan might be formulated that an inspector could be at a town or village at a certain date and the stallion owners could meet him there. The inspector going through the country is not satisfactory because the owner might not be at home.

Mr. Gardhouse: That matter was all taken up by the directors of the Horse-Breeders' Association and that was exactly the decision they came to, that the inspection should be done at some central point.

Q.—What would you do with the stallion owner who would not bring his horse for inspection?

A.—It would not get a license. We claim British freedom and I believe we live under the British Flag and I claim that unless a man was notified of the fact that he should have his horse there for inspection you would have no right to refuse him a license.

A Member: I do not think you should notify him at all. I think you should come on this man and inspect this man's horse as it stands in his stall in the true shape.

Mr. Pepper: That point was all discussed, and it was decided that by an advertisement or notice, every stallion owner should meet at a certain place and they can all be inspected at a certain time.

Clause 7 was then adopted.

Q.—Why should the Government appoint these Inspectors and not the Horse-Breeders' Association?

A Member: I think we should have enough confidence in our worthy Minister of Agriculture, from what we have learnt of him in our short experience, I think we can safely leave it in his hands, and in the hands of his colleagues.

A MEMBER: I think the Government is the only responsible party to have control of this matter. The Government is the representative of the people, and I think they are the only people to have charge of this matter.

Clause 8 was then taken up.

THOMAS HAYES: What are you going to do in case there is a deficit?

Mr. GRAHAM: As I understand, this matter of inspection and fee will have to be decided by the Government. This is only a decision by the Horse-Breeders' Association at the present time and the Government has not accepted it. If the horses have to be inspected from place to place $10 will be a very small amount, and if they are brought to a certain centre, where a man can inspect eight or ten in a day, it can be done for less. These matters should be left to the Minister of Agriculture.

Mr. RAMSAY: I think we can pass the resolution and fix the fee at $5.

Mr. GARDHOUSE: My friend can move an amendment.

Mr. PARNELL: How often are these stallions to be inspected; that will make a great deal of difference?

Mr. GARDHOUSE: They should be inspected once a year and the licenses issued once a year.

Mr. BAKER: Is it justice, that if a man takes pride in breeding a first-class horse in this Province that anybody should ask the Government to pass legislation to charge a fee for inspecting that first-class animal? If I breed an inferior animal and pay no attention to breeding, then it is my fault, and if that animal has to be inspected I should pay for it. I move that the fee should be cut out altogether and that we leave that to the Government.

Mr. BRIGHT: This matter was talked all over the Province and some of the stallion owners asked that the fee be put on, and they said it would be one of the greatest means of cutting out scrub horses. Some of them paid as high as $2,000 for their horses and they could afford to pay $100 as a fee for inspection. I do not think anybody would say the fee should be less than $10.

Mr. COOK: Is it right to charge a fee of $10 for inspecting an old fashioned carriage horse and then cut them out of the prize list at the fairs?

Clauses 9 and 10 were the declared carried.

A MEMBER: These men go home to the Old Country and import these horses and I am thankful for them bringing these horses out to this country, and on the other hand some of us men go out to Mr. Dalgety's stable and buy a horse and pay $1,000 or $2,000 for him and next year the Government may send around a man to inspect that horse and he may not give us a license for him. These horses should be inspected when they land, or be sold subject to inspection.

The CHAIRMAN: There is a very good point in that. A horse should be purchased subject to inspection. There are going to be many difficulties before it comes into force. That is a very pertinent question.

Q.—What about a horse that passes inspection this year and won't pass next year

The CHAIRMAN: We will not have such drastic legislation as will stop horse-breeding: we would be very foolish to pass any such legislation, that would be a retroactive movement.

Q.—Suppose a horse meets with an accident?

The CHAIRMAN: I do not think that would throw him out of his class. Hereditary unsoundness is what we have to watch out for.

Mr. ELLIS: I do not think the horse should be inspected every year. I think every two years would be sufficient, and those blemished which are not hereditary should not have any effect.

Clause 11 was declared adopted.

Mr. GARDHOUSE: We have found that a great many horses were syndicated at a great deal more than they were worth.

Mr. COOK: In some ways syndicating is all right, but where a horse travels in a certain section of the country and proves a poor horse, some fellow jumps up and takes that horse away 50 or 100 miles and tries to form a syndicate. He will pay one man $100 to go out with him and work, and another man will get a share free and it is a perfect humbug.

The CHAIRMAN: As we have no amendment, I suppose we must accept this as carried.

Mr. GARDHOUSE: While there is not another clause added to this, the Directors were unanimous in their opinion that there should be an annual inspection, and a fee of $10 was suggested with the idea that there would be inspection once a year. Now perhaps it would be well that I move that there would be another clause added, saying "That there be an annual inspection of stallions and an annual payment of $10."

Q.—Is there provision made for protection against false inspection?

Mr. PEPPER: I think you would be making a very serious mistake of you did away with the question of collecting the annual fee. It is not the intention to take that money out of the county, but it is intended that that shall form a nucleus for the County, or Spring Stallion Show. It will mean the collection of about $600 in our county and that would form a nice nucleus for creating a Spring Show, and if you added $1,400 to it, it would give you $2,000 and you would have a show that would be worth while.

A MEMBER: I am sure there are not that many stallions in our county and we will have to come to the Government for $1,900 instead of $1,400.

A MEMBER: I think this fee should be as low as possible.

Q.—How often does the best stallion get the prize at these shows?

A MEMBER: I do not think the fee is too much. Some owners do not use one man the same as another. They advertise one fee and then take another. A man will pay $2,000 for a horse, and start out with a good fee, and they cannot pay expenses, and then he has got to go lower.

The CHAIRMAN: We have had quite a lengthy discussion on these resolutions, and it has had a good educational effect upon all of us. For myself, I have gathered a great many ideas from what has been said here this afternoon. This is largely a matter of education. It must be education rather than compulsion, and whatever the Government may do, you can rest assured we shall try and err on the safe side.

DISCUSSION AT THE EASTERN ONTARIO LIVE STOCK AND POULTRY SHOW, 1908, OF SUGGESTIONS CONTAINED IN REPORT OF THE INVESTIGATION INTO THE HORSE BREEDING INDUSTRY; ALSO OF THE SUGGESTIONS MADE BY THE DIRECTORS OF THE ONTARIO HORSE BREEDERS' ASSOCIATION.

Hon. Nelson Monteith occupied the Chair at this meeting, and in his opening remarks said: I am glad that we have such a good turnout this afternoon to take part in the discussion that may arise on this live question of the "Horse Industry," that we are about to discuss this afternoon. We will discuss this question largely in an academic way.

The horse industry has assumed large proportions in this Province of Ontario. A very conservative estimate placed the value of horse flesh in this

Province at $74,000,000, and from the report received from the Commissioners who were sent out over a year ago, it was found that we had in this Province about 2,600 stallions, and that the number of brood mares had made a grand total of about 145,000. That will give you some appreciable idea of the extent of this vast industry, and it is our purpose as far as posssible to raise the quality and quantity of the output from the horses of this Province of Ontario. Ontario has been readily deemed a great breeding-ground for the whole Dominion, and with our vast and ever-increasing interests for the use of horse flesh in the construction of our great railways and the cultivation of the West,—and not only that, but the cultivation of our own fields as I trust they may be more extensively cultivated as years go on,—we will need better horses for the work. The electric age has not reached that perfection yet that it is going to supersede horse flesh. It was thought at one time, not so many years ago, that this industry would die out before now, but we find it vigorous to-day, and we want to make it more vigorous still.

Wm. Smith, President, Ontario Horse Breeders' Association, Columbus: I have been able to come to one conclusion, and that is that the steps the Hon. Mr. Monteith took two years ago in trying to create an interest in the Horse Industry in this Province and get information on these points, are certainly bearing fruit. I do not know that you could get together to think or talk over questions of greater moment than these which are involved on this leaflet. If the high ideal which Mr. Gardouse has given us here this afternoon could be found anywhere in this Province, it would not be necessary for us to meet to discuss these questions, neither would it have been necessary for the Hon. Minister to send a number of gentlemen throughout this Province to get information.

You will remember the Province was divided into eight districts, two gentlemen went into each district gathering all the information that was possible to get about the stallions and mares in their district, and those of you who have read the reports which these gentlemen have sent in to the Department, must have come to one conclusion, that was the unanimity of belief that there should be some radical steps taken in connection with the breeding of horses in this Province. As far as I know there was no meeting together of the delegates, no understanding whatever about it before they went out, or after they were out, that they should bring in reports cut and dried. If I had time this afternoon to draw your attention to the reports made in the different districts, you will find that in the East there was almost a unanimous expresssion of opinion as to what should be done. If you take the districts embracing the counties of Ontario, York, and Simcoe, and around that section, it is possible that it would not be so necessary to take any new steps from what we have been following in the past, and if you go to the West, you will find the same opinion. It seems to me, that we are all horsemen, that we are all interested in the different breeds, and in the furtherance of the horse interests of this Province, and something should be done to help the horse industry of this Province. We have gone on for thirty, forty or fifty years, in the same way, and anything very radical would cause a good deal of disturbance, and I am not going to advocate that, but I think I can point out to you certain lines and certain steps which could be taken which would further the interests of horse breeding in Ontario. You have been told of the great amount of money invested in the business, and it has been pointed out to you that if we could make the least improvement, how much it would add to the wealth of the farmers and breeders of this country. Why do we have a Department of Agriculture? Simply that they can make us take forward steps. That is one of the reasons why we have that Depart-

ment, that they shall from time to time be able to point to us and say we must step forward because, in these matters, the same as almost everything else in this Province, we have come to the stage that we cannot for one moment stand still, for if we do, we are going to go backwards, and especially do I think we should go forward in the great horse interests of this Province. I very much regret I was unable to be present at the Guelph gathering, which I understand was a splendid one. I did not hear the discussions, and principally what I know of that discussion, I received through the papers, and from some of my friends who were there. I do not know that it would be out of place, if I said I think you have taken a forward step, and in the right direction. What is the position which the breeders of the Province of Ontario occupy to-day? Sir, I say, they are at your back; they are at one end and you are at the other, and the Director of the Live Stock Branch, Mr. Westervelt, is between, and through him we can convey to you, sir, what we have that might be of interest to the horse breeders of the Province.

The following resolutions expressing the opinion of the Board, were adopted at meetings of the Directors of the Ontario Horse Breeders' Association, and will form a basis for our discussion this afternoon:

1. That there should be restrictions placed on the use of stallions.

2. That only pure-bred and registered stallions should be allowed to stand for service, except;

(*a*) That owing to one-third of the stallions in the Province being found by the Inspectors to be unregistered, that for three years grade stallions known to be good sires, and upon inspection found to be of good conformation and free from hereditary unsoundness, should be granted a license to be known as "Class 2."

3. That all stallions standing for service should be free from hereditary unsoundness.

4. That no horse having any of the following diseases should be given a license: Bone Spavin, Curby Malformation of the Hock, Boggy Malformation of the Hock, Ring Bone, String Halt.

5. That all stallions standing for service should reasonably comply with the standard of conformation for the breed which they represent.

6. That stallions should be inspected and that those complying with the above requirements, except those provided for in Section (*a*) of resolution 2, should be given a license to be known as "Class 1."

7. That there should be three Inspectors for each district, appointed by the Government. If the three Inspectors are unanimously in favor of refusing a license there should be no right of appeal against their decision. But in case the Inspectors should not be unanimous the stallion owner should have the right to appeal from their decision and to have an inspection by a board of appeal appointed by the Government for that purpose.

8. That all inspection should be made between October 15th and March 15th of each year, and that all licenses should be good for one year from the 15th of March following the date of Inspection.

9. That no person should be allowed to accept a service fee for any stallion unless a license has been take out for said stallion.

10. That all printed matter advertising any stallion should include a copy of the license certificate issued for such stallion.

11. That the license fee should be $10, out of which the expenses of the inspection should be paid and that the surplus collected from each County should be returned to the County to be used for the encouragement of Spring

Horse Shows, no more than two of which should be held in any electoral district.

12. That local Horse Show Associations should be encouraged in each County; that the Spring Horse Shows should be held under the management of these Associations and that these Associations should be affiliated with the Ontario Horse Breeders' Association.

13. That educational meetings should be held in connection with the Spring Horse Shows held in each County, by arranging to have special lectures on practical subjects relating to the horse industry.

14. That "syndicating" under the generally accepted meaning of the word, should not be encouraged and that some legislation should be passed to regulate it.

It appears to me that we have arrived at a time when that first resolution would almost go for the saying, that there should be restrictions on the use of stallions. On our travels through the different districts, we found that there were a number of stallions which in no way should be used. They were not sound, and their conformation was the worst, and if you will take the reports compiled by the Inspectors in the three Eastern Districts, you will find that statement to be true, and I will move the adoption of Clause No. 1.

The motion was seconded and carried.

The CHAIRMAN: Now we will take up resolution number two. This touches people in the East more than in the Central part of the Province. If pure-breds only were allowed to stand it might be hard for those who had invested their money, believing they could go on in the old way, and some of those grade stallions have been doing splendid service, and some of them were practically pure-bred, but have not been registered.

Moved and seconded in amendment that this clause be not accepted.

Amendment lost. Clause passed.

A MEMBER: I would say give them three years and let all grade stallions travel for the three years, the same as they have been doing and then shut the whole of them off at three years' time, and then you could license pure-breds or not, but I would not license a grade stallion, but I would not want to cut them off inside of three years without giving them a chance to turn them into money. I have imported some good stallions and I can remember a few years ago asking John Clark why he did not send good heavy stallions through a certain section in the East, and he said because they would starve to death. If you go through the country with a pure-bred stallion at two or three dollars you will get all you want to do, but if you charge a good price you cannot get it. I believe the thing ought to be forced into a reasonable basis, and I believe the resolution is most reasonable. I do not think anybody has a right to put inferior stock through the country, and I hope this meeting will support this resolution unanimously, and if you do we will be taking a long step in the right direction.

A MEMBER: Is this method if improving stock being followed in other countries, or is it simply a new get-up?

Mr. SMITH: The Province of Manitoba has taken a very forward step in this connection and it is almost along the lines that we have here and Manitoba is comparatively a new Province, and then in Scotland they have a system which seems to meet a great many of the difficulties, and I am bound to say I think if the farmers of this Province were alive to their own interests, steps could be taken on the Scottish lines, and it would be of the greatest advantage to this country. In Scotland they pay fabulous sums for the use of certain horses; Baron's Pride stands at twenty pounds, foal or no foal; Hiawatha at half that. Then supposing this had not been tried in other

countries, I do not know that this great Province has to stand idly by and see other provinces outstrip it. If we can take a step in the right direction surely you would not say let us stand still.

J. Lockie Wilson: The question we are discussing is of importance to the farmers of this country. In New Zealand the agricultural associations discussed this question at their last annual meeting. That is a very progressive country, and it has taken many forward steps, but after going into this question of licensing stallions they came to the conclusion that it was rather too radical a move and the farmers of that progressive country were not inclined to be forced into it, and decided that education would be much better than force. The conclusion they arrived at was not to compel farmers to use certain stallions and to say they they would be obliged to use only those that were licensed. Why not pass a law preventing a man from using anything but pure-bred bulls? I think it is well to encourage the horse breeding interest in this country and forward it in every possible way, but I feel, having been in close touch with the farmers of this Province, that a coercive measure such as proposed would not be satisfactory to the farmers of Ontario. I believe in education, in leading up to higher ideals and showing the farmers that by using pure-bred stallions and pure-bred sires in every class of live stock that they would gain in every way. I fear that a coercive measure such as the proposed one would be is too drastic at this juncture.

Mr. Bright: When Mr. Wilson speaks of New Zealand, I think the Province of Ontario can stand up to New Zealand or any other country, and I think we have got as good stock, and we have proved that we have got better stock then they have got in New Zealand, and although the people of New Zealand have discussed this and cut it out, that does not say that we should not adopt it. If the people of New Zealand had taken up this question, and experimented with it and then gone back on it, then we might take some advice from New Zealand. I certainly consider this a very liberal clause. I do not think the grade sire should be used in any breed of stock; however, it is the Horse Breeders' Association that is taking up this question, and they believe that it is in the best interest of the horse breeders that pure-bred sires should be used, and grades should not be used and as there are other clauses coming on later mentioning conformation and soundness, I think we should proceed. I do not think you will find a breeder in Canada who will say a grade sire should be used.

A Member: Here is one.

Mr. Bright: A grade sire without any breeding. What would you expect from a mare weighing ten or eleven hundred? If you breed her to a Clydesdale you can only get good stock in that way.

A Member: Yes, I have.

Another Member: What system of inspection is calculated to be used by the Horse Breeders' Association and by the Government?

Mr. Bright: There is a clause that explains this.

A Member: This resolution seems to be a one-sided one. I find everything to protect the owner of the stallion, and nothing to protect the farmers. There is one thing I take objection to, I think the stallion owners should be limited to a certain number of mares. I know some that get two hundred and there would not be thirty per cent. colts and there is no restriction on the price. Set a certain number of mares that they cannot go beyond and then set a certain price. I am in favor of licensing stallions and having good ones, but I think there should be some restriction.

A Member: I say it is time we established a Canadian breed of draft horses and then afterwards a breed of light horses. I think if we would quit

importing and go to work and establish a Canadian breed of horses it would be a good thing. Our horses that have gone to the United States and South Africa established a reputation for hardiness.

A MEMBER: I agree with the gentleman that we have some tough, hardy horses and we have some hardy Canadian men as well. I believe in staying with our own country. I have as good a Shire horse as ever was collared; he is only a grade, from a fourteen to a fifteen hundred horse, and he can trot thirty-six miles. A neighbor of mine had two pure-bred mares—Clydesdales—and this horse of mine would kill both of them. I believe in improving our stock, but do not tie the farmers' hands; I do not think it is right.

A MEMBER: What was your horse sired by?

A.—A Shire, an imported horse. It is out of a Canadian mare.

Mr. GARDHOUSE: That is the very thing we have been trying to get at the whole afternoon. I have been telling you to use a good stallion, and there is the beauty of using a pure-bred stallion.

A MEMBER: I can remember the day our French-Canadian horses could down any imported horse in the country. I have another mare sired by a grade, and she will draw twenty-five or thirty hundred, and there is not a Clydesdale that can come near her and she is Canadian-bred.

Mr. SMITH: I was surprised to hear the remarks of my friend, Mr. Wilson, as to this being a coercive measure. A person cannot get a drink of liquor in the village in which I live. Is it coercive because you cannot get a drink or another man cannot run an automobile at a certain rate? I think Mr. Gardhouse misunderstood this point. I think he wants to start a new breed of horses and call them Canadian. The man who said keep the imported horses out of the country is wrong, and if this resolution was adopted it would just carry out what the gentleman wanted. This Association simply gives them the right to use grade horses for three years, simply because there would not be enough pure-bred horses in the country to supply the big demand. No man that had anything to do with this resolution thought of coercion for one minute. I hope we have heard that word for the last time to-day, and Mr. Wilson, I think, is the last man who should have uttered it. We want freedom: we want to hear both sides of the question discussed and if we try to shut out fair and square discussion we are treating the people of this Province unfairly.

Mr. WILSON: When the three years have expired will farmers be compelled to use the improved stallions?

ANOTHER MEMBER: There are a lot of pure-bred stallions that are no good.

Mr. WILSON: Mr. Smith stated that the word coercion should not be used in this meeting, and he hoped he would not hear it any more. It is not the first time I opposed coercion and it may not be the last. I used the word advisedly. I am opposed to coercion of this kind, and would recommend the Horse Breeders' Association to go in for a system of education rather than attempt to force farmers into legislation of this sort. I have been breeding pure-bred stock for twenty years, and I have not used a grade sire in all that time, neither a stallion nor a rooster. I am a Scotchman, and if any Government had attempted to coerce me into using a stallion or any other animal I did not want, I would fight for the right to use my own judgment in matters such as these.

A MEMBER: What about the stallions that would not be licensed?

Mr. SMITH: The owner of that stallion could use him for his own mares, but he could not collect a fee.

A MEMBER: Horses are selling well and any kind of a good Clyde is worth from two hundred to two hundred and fifty dollars. If these horses are allowed to go over the country for three years they will do a lot of harm. I think we should start right now and make them use good stallions.

A MEMBER: In case these stallions were licensed, and a horse travelling in a certain district was A1 in his make-up in every way, and supposing he did not get the mares in foal one season what would be the consequence in regard to getting a license for that horse the next season, could he be licensed or not?

A MEMBER: I will admit there are stallions that do not get foals in our district. We have got to insure them. I think the man who attends to his mares properly will be sure of a colt.

The CHAIRMAN: I am glad the discussion has been good and lively, but I hope we will get on a little more speedily. We will now take up clauses three, four and five.

Clauses three, four and five were then declared adopted.

The CHAIRMAN: We will now take up clauses six and seven.

Mr. SMITH: There was a great difference of opinion as to how this should be done. Some thought it to be a district matter, others a county matter, others thought one inspector should do the work and that there should be court of appeal, others want three inspectors and if they should be unaminous there should be no appeal whatever.

Moved and seconded that clauses six and seven be adopted.—Carried.

Mr. SMITH: As to clause eight, I do not think there is much difference of opinion, but there is a feeling that there might be too much change and if a stallion passed one inspection and was sold and went from the Eastern to the Western part of the Province an inspection should hold good.—Carried.

Clauses 9 and 10 were then adopted.

Mr. SMITH: I think these stallions shows should accomplish a great deal more good than they are doing.

Mr. WILSON: There have been more stallion and bull shows this Spring than ever before. A special Act was passed giving a grant to all associations that had held stallion and bull shows, and there were more held this year than ever before.

Clauses eleven and twelve were then carried.

A MEMBER: I have often thought if it were possible at these gatherings it would be a good thing to have a few horses for the purpose of showing their good and bad points.

Mr. HODGINS: Why have we so many meetings? We have not the time to attend to them all, I think it would be better to have one big meeting.

The CHAIRMAN: I have been very much impressed with the fact that we have to save time. Life is so short and we are so busy and we have to deal with so many things. The intention was that the horses should be brought together for inspection purposes and to be judged by the inspectors, and that lectures might be given to those assembled for the purpose of educating them.

Clause thirteen was then declared carried.

Mr. SMITH: One of the worst things we had to deal with was the matter of syndicating horses. If a dozen men meet together and decide they would buy a stallion. We do not think that is syndicating, but what we object to is where someone brings a stallion into a certain section of the country, and he buys up the most popular and strongest man in that division, gives him a share for nothing and then he leads the rest of them into it. I have in my mind a couple of horses that were syndicated for six thousand dollars, and I would not give six hundred for the two of them, and I think a legislative measure

should be passed to do away with that kind of thing. I believe it is a common sense plan to have half a dozen men club together and buy the best horse they know of. I move the adoption of clause fourteen.

The CHAIRMAN: This is just an expression of opinion, syndicating, as expressed by Mr. Smith, is not in the best interest of the horse industtry. Are you all in favor of that?

The motion was carried.

The CHAIRMAN: I have to thank you for the splendid order and good discussion you have given this question. While I recognize that you are but a small fraction of the men who are interested in the horse industry, I do feel to some extent, that you are making a progressive step. Leaving it to my own discretion in a matter of this kind as to the method of procedure, I may say I am a great believer in education. I believe education will do more than legislation, and there is no doubt, that these resolutions will have a good effect, and when popular opinion is strong enough, as I believe it will be in the future, many of these resolutions may be put into law. There is a great improvement in the horse industry, and I just speak from my own local community and the conditions of affairs in the community in which I live. I live in the centre West. In Perth and Huron counties we have a great many heavy draft horses, and the farmer there who would use a grade horse is looked upon as being very much out-of-date. We feel that the best is not too good, and the buyers come among us and purchase geldings and fillies at from two hundred to five hundred dollars without difficulty, and we feel it is a good business and it is a business that we have to maintain by keeping up the standard, and it is the dollars after all that we must consider, and I believe our interests in this matter are sufficient to make us use the best methods for production. I thank you again for the interest you have taken in this gathering and I hope you will go away from this meeting and take a better interest in the horse industry of the Province.

ADDRESS.

By HON. SYDNEY FISHER, DOMINION MINISTER OF AGRICULTURE, OTTAWA.

No apology is due me for the delay in my addressing this meeting. I have been extremely interested in what has been going on. It shows the business way in which discussions of this kind can be successfully carried on. I shall take upon myself briefly to congratulate Mr. Smith on the way in which he put these resolutions before the meeting. He has been successful in obtaining the adoption of very important resolutions. It has been done without the slightest suppression of free discussion; in fact discussion has been invited, most cordially and earnestly invited, and it is evident that the consensus of opinion in this gathering is in favor of the resolutions as put before you, although in some details there may be a difference of opinion. I want to congratulate you on the passage of these resolutions. I am not very much of a horse breeder, although I always raise a few colts. The principle of horse breeding is practically the same as breeding any other kind of stock, and the first essential of breeding is that the sire must necessarily be pure-bred. I use the word pure-bred advisedly. There are pure-breds and pure-breds. I don't mean to say that simply because an animal is entered in a register, that therefore it is a suitable and successful sire. I consider there are two reasons why the pure-bred sire may not produce the best stock. The first

reason is that the pure-bred sire, registered as he is and really descending from pure animals of the particular breed, may happen not to be an absolutely good specimen of the breed. This means in other words, that purity of breed is not an absolute proof that the animal will be good. There is another reason. The pure-bred sire may be perfectly good for one female and not be a success when mated with another. The science of breeding is judgment exercised in mating the animals which you are breeding. We have been a little too much inclined to consider that any animal that is registered as a pure-bred is necessarily a suitable animal for us to use. That is not always the case. I have known registered animals that were not good specimens of their breed, and I have known other registered animals that were good specimens for a certain purpose to give a certain result, and yet not necessarily good in every case with all kinds of females. Judgment, therefore, is essential to the mating of the animals and the really successful breeder is the man who exercises his judgment and chooses the proper sire to use with the animals which he may have. Let me say in this connection that horse breeding is perhaps the most difficult of any. The breeding of horses is more difficult because the horse is intended for different purposes. You may want a very heavy draft animal for which you have to use a certain class of stallion and you must choose mares that are suitable to go with that heavy class of sire. You may want a general purpose horse and some of you may want an animal that will be able to go on the road and be a good horse to work, and this animal requires a different stallion, but when you breed a dairy cow you have but the one object, and that is to breed an animal that will give you a large quantity of milk. It is true that occasionally a bull is used by your neighbors, and a boar or a ram may be used by your neighbors, but is is generally the case that you keep your own sires for that class of stock. A stallion is practically at the public service and for the benefit of the whole community and therefore it is thought that the Government or the Legislature has more right to step in and deal with the stallion than they would have in the case of a bull or a ram or a boar. There is a very important difference, and I think one of the chief justifications for this demand in the great Province of Ontario that the Government should step in and deal with the stallion question. I am in hopes that the Legislature of the Province of Ontario will do something of this kind.

I am glad to have had this opportunity of saying a few words. I would like to stay a longer time at this live-stock show of Eastern Ontario. I have all the time been interested in the establishment of this show in Ottawa, I only regret it has not prospered as I should like to have had it. I understand it is not as successful as it should be. I think the farmers of Eastern Ontario and Western Quebec are not living up to their privilege in not sustaining this exhibition better than they are doing. I am glad to see that as far as the lectures are concerned, it is a success, which will no doubt lead to a success in other parts of the exhibition. I wish to thank you for coming to this exhibition and taking the interest which you have in it. It is essentially in the purview of the Provincial authorities, but at the same time, as Minister of Agriculture for the Dominion, I wish to express my sympathy with it, my interest in it and my heartiest wishes for its continued success.

ONTARIO HORSE BREEDERS' EXHIBITION.

Held in St. Lawrence Market Arena, Toronto, on February 26th to 28th, 1908.

LIST OF PRIZE WINNERS.

Clydesdale Stallions, foaled previous to January 1st, 1904.

1st.—Sir Marcus (imp) [7790] (13205), bay, ratch on face, white legs, foaled 1903. Bred by Wm. Burns, Bowfield, Scotland. Imported and exhibited by Graham, Renfrew Co., Limited, Bedford Park; sire, Sir Simon [5406] (10465); dam, Bowfield [13878] (18569), by Breadalbane (1978).

2nd.—President Roosevelt (imp) [7759] (13651), bay, face and legs white, foaled May 1, 1902. Bred by Matthew Marshall, Bridgebank, Stranraer, Scotland. Imported and exhibited by Smith & Richardson, Columbus, Ont.; sire, Marcellus [4683] (11110); dam, Young Swallow [5299] (13535) by Excelsior [4191] (5751).

3rd.—Gilt Edge (imp) [6890] (12588), bay, face and legs white, foaled May 9th, 1903 Bred by John Meikle, Craigrie, Clackmannan, Scotland. Exhibited by Thos. Mercer, Markdale, Ont.; sire, Hiawatha [3430] (10067); dam, May Rose [11096] (15679), by Lord Colmin Edwin [3083] (9280).

4th.—Baron Silloth (imp) [6128] (12470), bay, foaled March, 1903. Bred by John Wright & Sons, Silloth, Scotland. Imported and exhibited by R. Ness & Son, Howick, Que.; sire, Baron's Pride [3067] (9122); dam, Seabreeze [9229] (15902), by Lord Lothian [3513].

5th.—Right Forward (imp) [4363] (12310), bay, star, off hind foot white, foaled May 28th, 1901. Bred by James Davidson, Newton of Cairnie, Huntly, Scotland. Exhibited by Graham Bros., Claremont, Ont.; sire, Prince Thomas [4028] (10262); dam, Mary 2nd [5587] (14535), by Sirdar [2875] (4714).

6th.—Royal Carlung (imp) [5356] (11486), light bay, white hairs, stripe on face, off fore leg and hind legs white, foaled June 5th, 1900. Bred by John Machray, Drimmies, Pitcaple, Aberdeenshire, Scotland. Imported and exhibited by Dalgety Bros., London; sire, Prince of Carlung [3089] (71746); dam, Royal Queen [7338], by Mount Royal (8065).

7th.—Breadalbane (imp) [4558] (11637), bay, white face, four white legs, foaled August 17th, 1901. Bred by Alex. Guild, Aberlady, Scotland. Exhibited by Thos. Mercer, Markdale, Ont.; sire, Hiawatha [3430] (10067); dam, Lady Gartly [8292] (13834), by Royal Gartly [2859] (9844).

8th.—Medallion (imp) [8042] (12247), black, white stripe on face, three white legs, white mark on stifle, foaled 1902. Bred by Robert Brown, Overhill, Beltelvie, Scotland. Exhibited by O. Sorby, Guelph; sire, Baron's Pride [3067] (9122); dam, Balmedie Vesta (13911), by McGregor (1487).

9th.—Duke of Malton (imp) [7768] (12947), black, white blaze on face, four white legs, foaled 1903. Bred by John Watson, Millom Castle, Millom, England. Imported and exhibited by Smith & Richardson, Columbus, Ont.; sire, Sir Everest [4840] (10917); dam, Nell of Millom Castle [10031] (15335), by Londonderry [3930] (7934).

Clydesdale Stallions, foaled in 1904.

1st.—Royal Choice (imp) [7846] (13165), bay, stripe on face, four white legs, foaled 1904. Bred by John Barrowman, Carrahill, Kirkcudbright, Scotland. Imported and exhibited by Graham Bros., Claremont, Ont.; sire, Everlasting (11331); dam, Jean 2nd of Caigton (14478), by Prince of Galdenoch (8157).

2nd.—Buchlyvie Laird (imp) [6102] (13389), light brown, white spot on off side of body, face and legs white, foaled May 1, 1904. Bred by Jas. Dunlop, Barassie, Troon, Ayrshire, Scotland. Imported and exhibited by Smith & Richardson, Columbus, Ont.; sire, Baron of Buchlyvie [5353] (11263); dam, Buxom Lady [9182] (16051), by Buxom Lad [2887] (7533).

3rd.—Auchenrieve (imp) [8012] (12807), bay, stripe, four white legs, foaled April 21st, 1904. Bred by John McPherson, Mulben, Keith, Scotland. Imported and exhibited by T. H. Hassard, Millbrook, Ont.; sire, Moncreiffe Marquis (imp) [6735] (9953); dam, Nettie of Inchcorsie [14903] (13272), by Lord Montrose [3568] (7973).

4th.—Dunure George (imp) [6886] (12955), bay, face and legs white, foaled April 1904. Bred by George Graham, Faraway, Kippen Station, Scotland. Imported and exhibited by T. H. Hassard, Millbrook, Ont.; sire, Baron of Buchlyvie [5363] (11263); dam, Bessy Lea [8489] (13821), by Lord Lothian [3513] (5998)

5th.—Knight of Maryfield (imp) [7760] (13051), brown, gray hairs, white face, hind legs white, foaled June 1st, 1904. Bred by A. B. Leitch, Inchstelly, Alves, Forres, Scotland. Imported and exhibited by Smith & Richardson, Columbus, Ont.; sire, Prince Thomas [4028] (10262); dam, Polly of Earnside [13811] (15157), by Duke King (5723).

6th.—Present Fashion (imp) [7194] (13125), dark brown, white face, white mark below knee on off fore leg, near hind leg and off hind fetlock white, foaled May 16, 1904. Bred by Thos. Smith, Blacon Point, Chester, England. Imported and exhibited by And. Aitcheson, Guelph, Ont.; sire, Drumflower [3833] (10537); dam, Belle of Fashion [6350] (12924), by Prince of Fashion [3507].

7th.—Vanderbilt (imp) [6124] (13818), bay, foaled 1904. Bred by James Dunlop, Fenwick, Scotland. Imported and exhibited by R. Ness & Son, Howick, Que.; sire, Casabianca (10523); dam, Rosie of Oldhall [9217] (16640), by Fickle Fashion [4641] (10546).

8th.—Pride of Avon (imp) [8002] (13653), black, face and three legs white, foaled June 17, 1904. Bred by Jas. Lambie, Bonnyton Moor, Eaglesham, Scotland. Exhibited by T. D. Elliott, Bolton, Ont.; sire, Rathillet (imp) [7110] (11870); dam, Lily of Bonnyton [14809] (16171), by Carthusian [3506] (9722).

9th.—Hillhead's Premier (imp) [7598] (13525), bay, white stripe in face, white on off fore ankle, hind legs white, near fore leg white above ankle, foaled May 7, 1904. Bred by Wm. Strachan, Jackston, Gowrie, Scotland. Exhibited by Walter Leonard, Craigvale, Ont.; sire, Hillhead Chief [5379] (10774); dam, Bridesmaid of Jackston [13136] (16386), by Prince of Carruchan (8151).

Clydesdale Stallions, foaled in 1905.

1st.—Baron Howes (imp) [7791] (13847), black, stripe, four white legs, foaled May 1, 1905. Bred by John Brown, Howes, Annan, Scotland. Imported and exhibited by Graham, Renfrew Co., Limited, Bedford Park, Ont.; sire, Baron Hood [6137] (11260); dam, Crown Pearl of Arnprior [5885] (13405), by Crown and Feather [4643] (8559).

2nd.—Glensman (imp) [6809] (13505), bay, face and legs white, foaled June, 1905. Bred by W. Drennan, Carse Hall, Limavady Jct., Scotland. Imported and exhibited by John A. Boag & Son, Queensville, Ont.; sire, Flash Sturdy [6772] (11710); dam, Miss Ceriolo [14485] (16042), by Mains of Airies [2865] (10379).

3rd.—Black Ivory (imp) [7761] (13367), black, white face, hind legs and off fore foot white, foaled April 19th, 1905. Bred by James Durno, Jackstown, Bothie, Norman, Scotland. Imported and exhibited by Smith & Richardson, Columbus, Ont.; sire, Everlasting [5346] (11331); dam, May Blossom [10365] (16058), by Prince Thomas [4028] (10262).

4th.—First Baron (imp) [6413] (Vol. 29, S.), bay, blaze, four white legs, foaled 1905. Bred by Jas. Hamilton, Drumburle, Ayr, Scotland. Imported and exhibited by T. H. Hassard, Millbrook, Ont.; sire, Hiawatha [3430] (10067); dam, Jean of Drumburle [9879] (Vol. 29, S.), by Triumph [6414] (9864).

5th.—Kinpurnie (imp) [7817] (13866), bay, ratch down face, near leg white almost to knee, near hind leg white, foaled April 28, 1905. Bred by Jos. G. Scott, Kinpurnie, Scotland. Imported and exhibited by Dalgety Bros., London, Ont.; sire, Royal Favorite (10630); dam, Kate of Kinpurnie (18645), by Cawdor Cup (10045).

6th.—Craignair (imp) [7793] (13850), brown, stripe on face, off hind ankle white, little white on near hind hoofhead, foaled 1905. Bred by Geo. Baird, Meikle Dalbeattie, Scotland. Imported and exhibited by Graham, Renfrew Co., Ltd., Bedford Park, Ont.; sire, Lothian Again [7430] (11804); dam, Mall 2nd [13880] (13691), by Mactopper [2800] (8831).

7th.—Baron Columbus (imp) [6106] (Vol. 29, S.), bay, foaled 1905. Bred by Mr. Dow, Littleton, Grivan, Scotland. Imported and exhibited by Smith & Richardson, Columbus, Ont.; sire, Baron of Buchlyvie [5353] (11263); dam, Peebles Mare [9177], by Montrave Mac [3087] (9953).

8th.—Fickle Baron (imp) [7719] (13474), bay, foaled May, 1905. Imported and exhibited by R. Ness & Son, Howick, Que.; sire, Baron's Pride [3067] (9122); dam, Fortune [6278] (15191), by McGregor [4486] (1487).

9th.—Dragoon (imp) [8074] (13445), bay, white on face, off fore ankle and hind legs white, foaled July, 1905. Bred by David Logan, The Park, Maxwelltown, Dumfries, Scotand. Imported and exhibited by O. Sorby, Guelph; sire, Royal Edward (11405); dam, Lilly of Hightown (15616), by William the Conqueror (9093).

Clydesdale Stallions, Foaled in 1906.

1st.—King Easy (imp) [7853] (13861), brown, stripe on face, off fore and hind legs white, foaled 1906. Bred by Robert Graham, Auchengassel, Twynholm, Scotland. Imported and exhibited by Graham Bros., Claremont, Ont.; sire, Baron Mitchell (10688); dam, Darling (16704), by MacGregor (1487).

2nd.—Royal Benedict (imp) [6754] (13927), bay, foaled 1906. Bred by Wm. Smith, Garrarie, Scotland. Imported and exhibited by R. Ness & Son, Howick, Que.; sire, Benedict (10315); dam, Rosie of Low Ashland (14423), by The Royal Standard (2220).

3rd.—King O' The Barons (imp) [7852] (13860), brown, stripe on face, hind legs and nigh fore leg white, foaled 1906. Bred by Frank Elliott, Middle Stots, Duns, Berwickshire, Scotland. Imported and exhibited by Graham Bros., Claremont, Ont.: sire, Baron Airies (12018); dam, Lady Kimmeryhame (17604), by Mains of Airies (10379).

4th.—Top Spot (imp) [7795] (13848), bay, white face, hind legs and near fore foot white, foaled May 25, 1906. Bred by A. & W. Kerr, Old Graitney, Gretna, Scotland. Imported and exhibited by Graham, Renfrew Co., Ltd., Bedford Park, Ont.; sire, Baron Hood [6137] (11260); dam, Lady Stormont [13886] (16157), by Darnley Again (9182).

5th.—Timothy (imp) [6811] (13852), bay, face, near fore and hind legs white, foaled June, 1906. Bred by Jas. McAdam, Slogarie Mains, New Galloway Station, Scotland. Imported and exhibited by John A. Boag & Son, Queensville, Ont.; sire, Benedict [3664] (10315); dam, Slogarie Pearl [14576] (14671), by Prince Robert [2891] (7135).

6th.—Rab the Ranter (imp) [7758] (13858), brown, white stripe on face, off hind leg white, foaled 1906. Bred by R. Brown, Overhill, Belbelvie, Scotland. Imported and exhibited by Smith & Richardson, Columbus, Ont.; sire, Everlasting [5346] (11331); dam, Balmedie Vesta [8394] (13911), by McGregor [4486] (1487).

Clydesdale Mares, foaled previous to January 1st, 1905.

1st.—Floshend Princess (imp) [13788] (18613), bay, white on face and legs, foaled May, 1904. Bred by Jas. Crawford, Floshend, Gretna, Scotland. Imported and exhibited by Smith & Richardson, Columbus, Ont.; sire, Prince Tom [4145] (11149); dam, Lily of Flosh [13816] (18614), by Williamwood [3939] (8391).

2nd.—Queen Bess (imp) [10982] (Vol. 29, S.), bay, face and hind legs white, foaled 1904. Bred by Stephen Mitchell, Boquhan, Kippen, Scotland. Exhibited by J. W. Cowie, Markham, Ont.; sire, Balmedie Queen's Guard [5870] (10966); dam, Bessie Dunn, [10983] (15699), by Wear them A' [6980] (8385).

3rd.—Blacon Jewel, alias Lady Alexandra (imp) [14856] (18625), bay, stripe, near hind leg white, foaled April 23, 1902. Bred by A. & W. Montgomery, Netherhall and Banks, Kirkcudbright, Scotland. Imported and exhibited by Andrew Aitcheson, Guelph, Ont.; sire, Baron's Pride [3067] (9122); dam, Graceful [5651] (13977), by MacGregor [4486] (1487).

Clydesdale Mares, foaled in 1905.

1st.—Crissa Princess (imp) [14407] (18593), bay, face and legs white, foaled May 22, 1905. Bred by Col. Geo. Smith Grant, Minmore, Glenlivet, Scotland. Exhibited by Hodgkinson & Tisdale, Beaverton, Ont.; sire, Prince Thomas [4028] (10262); dam, Crissa Macilroy [14404] (17708), by Macilroy [3835] (9795).

2nd.—Hannah (imp) [14567] (18576), dark bay, stripe, fore legs dark, splash of white inside near hind leg, off hind leg white to hock, foaled April 1905. Bred by John Wilson, Sanden House, Abbey Town, Carlisle, England. Imported and exhibited by John A. Boag & Son, Queensville, Ont.; sire, Douglas Chief [7359] (11682); dam, Smiler of Sanden House [11847] (15889), by Forest Hero [3797] (9529).

3rd.—Hamilton Rose (imp) [14805] (18729), brown, white face, four white legs, foaled May 20, 1905. Bred by Ferrier Pace, Ormiston Mains, Ormiston, Scotland. Imported and exhibited by T. D. Elliott, Bolton, Ont.; sire, Hiawatha [3430] (10067); dam, Banks Trophy [14818] (15213), by Baron's Pride [3067] (9122).

4th.—Eleanor Sproat (imp) [14859] (18633), brown, star, little white on off fore ankle, hind legs white, foaled 1905. Bred by W. T. Sproat, Boyne House, Kirkcudbright, Scotland. Imported and exhibited by Andrew Aitcheson, Guelph, Ont.; sire, Majestic [5325] (11121); dam, Tibbie of Margrie [14861] (18348), by Baron's Pride [3067] (9122).

Clydesdale Mares, Foaled on, or subsequent to January 1st, 1906

1st.—Craigie Beauty (imp) [14804] (18742), brown, stripe, four white legs, foaled May, 1906. Bred by Alex. Anderson, Berryhill, Dundee, Scotland. Imported and exhibited by T. D. Elliott, Bolton, Ont.; sire, Royal Blend [6041] (11893); dam, Black Beauty [14813] (16471), by Crown and Feather [4643] (8559).

2nd.—Bishopton Queen (imp) [14072] (18596), bay, stripe, near fore and near hind ankles white, foaled May, 1906. Bred by John Currie, Bishoptown, Kirkcudbright, Scotland. Exhibited by Hodgkinson & Tisdale, Beaverton, Ont.: sire, Prince Sturdy [2881] (10112); dam, Maggie [14402] (18597), by Baron's Pride [3067] (9122)

3rd.—Rose Campbell (imp) [14566] (18582), bay, white face and four white legs, foaled 1906. Bred by John Campbell, Slagnaw, Castle Douglas, Scotland. Imported and exhibited by John A. Boag & Son, Queensville, Ont.; sire, Benedict [3664] (10315); dam, Bell of Auldbrick [14574] (18581), by King of the Roses [3493] (9927).

4th.—Craigsie Belle (imp) [14073] (18594), dark brown, white face, little white on hind feet, foaled May 26, 1906. Bred by John Meikle, Craigsie, Clackmannan, Scotland. Exhibited by Hodgkinson & Tisdale, Beaverton, Ont.; sire, The Dean [4033] (10937); dam, Lady Orlando [14401] (15678), by Orlando [3046] (8092).

Canadian-Bred Clydesdale and Shire Stallions, foaled previous to January 1st, 1905.

1st.—Lavender's Best [6320], dark bay, stripe, hind feet white, foaled June 10, 1904. Bred by Wm. D. Beath, Columbus, Ont. Exhibited by Smith & Richardson, Columbus, Ont.; sire, Lavender (imp) [3375] (11394); dam, Lakeview Kate [9668], by Lawers Baron Gordon (imp) [1005] (5136).

2nd.—General Bobs [2603], bright bay, stripe, four white feet, foaled June 20, 1898. Bred by E. W. Charlton, Duncreif, Ont. Exhibited by A. G. Gormley, Unionville, Ont.; sire, Marquis of Salisbury (imp) [1908] (5208); dam, Lady Wigtown [2680], by Wigtown Lad (imp) [552] (5441).

3rd.—Golden Conqueror [4251], chestnut, white face and feet, foaled July 27, 1902. Bred by A. Doherty, Ellesmere, Ont.; exhibited by Jos. E. Teeson, Thornhill, Ont.; sire, Cloth of Gold [2959] (8962); dam, Daisy Belle [2596], by Bruce (imp) [1595] (8496).

4th.—Fairview Boy [5734], brown, stripe, white legs, foaled April 15, 1904. Bred by Jas. Kelly, Fairview, Ont. Exhibited by Kalbfleish & Schaefer, Tavistock, Ont.; sire, The Leading Article (imp) [3967] (10139); dam, Polly Patrick [8578], by Prince Patrick (imp) [2266] (8993).

5th.—Macarlie [6398], bay, stripe, near fore and both hind feet white, foaled May 26, 1904. Bred and exhibited by Geo. Davidson & Sons, Cherrywood, Ont.; sire, Macqueen (imp) [462] (5200); dam, Fair Queen [3920], by Queen's Own (imp) [1708] (7176).

6th.—Prince Harmony [5851], bay, white face, four white feet, foaled November 2, 1904. Bred and exhibited by Jas. Bruce, Egbert, Ont.; sire, Harmony (imp) [2951] (10772); dam, Beck Montrave [8703], by Montrave Chief (imp) [537] (5222).

7th.—Balmanno Pride Prince [5798], bay, white stripe on face, off front foot little white, hind legs white, foaled July, 1903. Bred and exhibited by David Howard, Amber, Ont.; sire, Balmanno (imp) [3703] (10676); dam, Dandy B. (Vol. 15), by Lyon McGregor (imp) [2308].

Canadian-Bred Clydesdales and Shire Stallions, Foaled in 1905.

1st.—Independence [5731], bay, stripe, hind feet white, foaled July 4, 1905. Bred and exhibited by A. G. Gormley, Unionville, Ont.; sire, Fullarton (imp) [2370] (9910); dam, Madge of Hallcroft (imp) [4776], by Ornament [3421] (10603).

2nd.—Highland James [6709], bay, off fore and both hind feet white, foaled June 2, 1905. Bred by F. E. Reesor, Locust Hill, Ont. Exhibited by Smith & Richardson, Columbus, Ont.; sire, Bucephalus (imp) [3338] (11288); dam, Crescent Maud [10655], by Brown James (imp) [731] (5595).

3rd.—MacRobbie [6397], dark bay, hind feet white, foaled May 24, 1905. Bred and exhibited by Geo. Davidson & Sons, Cherrywood, Ont.; sire, Macqueen (imp) [462] (5200); dam, Fair Queen [3920], by Queen's Own (imp) [1708] (7176).

4th.—Gladden's Pride [7922], bay, stripe, four white legs, foaled May 21, 1905. Bred by John Laurie, Malvern, Ont. Exhibited by Smith & Richardson, Columbus, Ont.; sire, Hopewell (imp) [3377] (11375); dam, Fanny [2518], by Self Esteem (imp) [377] (5344).

5th.—Erskine Cornerstone [6881], brown, stripe, off hind leg white, foaled July 10, 1905. Bred and exhibited by John Vipond, Brooklin, Ont.; sire, Cornerstone (imp) [3505] (11016); dam, Kate Erskine [3431], by Erskine (imp) [1652] (4986).

6th.—Glen Forward [5754], bright bay, foaled 1905. Bred and exhibited by Alex. Doherty, Ellesmere, Ont.; sire, Right Forward (imp) [4363] (12310); dam, Daisy Belle [2596], by Bruce (imp) [1595] (8496).

7th.—Baron's Heir [6467], bay, small ratch, off hind foot white, foaled May 25, 1905. Bred and exhibited by Job White, Ashburn, Ont.; sire, Baron Primrose (imp) [3979] (10980); dam, Mona Queen [7863], by Macqueen (imp) [462] (5200).

Canadian-Bred Clydesdale and Shire Stallions, foaled on, or subsequent to January 1st, 1906.

1st.—Sandy Montgomery [7700], bay, white face, four white legs, foaled May 21, 1906. Bred and exhibited by T. A. Wood, Bradford, Ont.; sire, Harmony (imp) [2951] (10772); dam, Maud Macindoe [5157], by Macindoe (imp) [538] 7418 (6040).

2nd.—Gallant Marcellus [6845], bay, stripe, four white legs, foaled May 4, 1906 Bred and exhibited by John S. Johnston, Ravenshoe, Ont.; sire, Gallant Robert (imp) [3658] (10347); dam, Black Belle (imp) [5978], by Marcellus [4683] (11110).

3rd.—Baron Erskine [5743], bright bay, face and hind feet white, white up fore part of leg, foaled March 27, 1906. Bred by Albert E. Robinson, Oshawa, Ont.; exhibited by Smith & Richardson, Columbus, Ont.; sire, Baron Montague (imp) [3832]; dam, Lady Kate 2nd [7437], by Erskine King [2506].

4th.—Scottish Pride [6499], bay, ratch, off hind pastern white, foaled June 11, 1906. Bred and exhibited by John Thompson, Belwood, Ont.; sire, Scottish Celt (imp) [2749] (10007); dam, Mayflower [5192], by Reckoner (imp) [2748] (10864).

5th.—Star of Edgeley [8008], dark bay, star and small stripe, near fore foot and off hind leg white, foaled May 13, 1906. Bred and exhibited by Silas McDougall, Edgeley, Ont.; sire, The Treasurer (imp) [3615] (11564); dam, Maggie Lochill [14840], by Lochill 2nd [1942].

6th.—Souter Johnnie [8016], bay, spot on face, hind legs white, foaled June 18, 1906. Bred and exhibited by Robert Martin, Wexford, Ont.; sire, Hopewell (imp) [3377] (11375); dam, Dolly of Aberfoyle [14891], by Plain Boy (imp) [698] (6141).

7th.—General Grant [7908], dark bay, stripe, off hind leg white, foaled May 3, 1906. Bred and exhibited by Ryerson M. Grant, Bradford, Ont.; sire, Harmony (imp) [2951] (10772); dam, Lady Violet [8449], by Grand Times (imp) [363] (3670).

Canadian-Bred Clydesdale and Shire Mares, foaled previous to January 1st, 1905.

1st.—Queen of Kelso [8675], bay, stripe, near fore foot and both hind feet white, foaled June, 1903. Bred and exhibited by Walter L. Elliott, Kelso, Ont.; sire, Valentine (imp) [2783] (9459); dam, Jean Airds [3064], by Prince of Airds (imp) [530] (4641).

2nd.—Nettie Macqueen [2873], bay, small stripe, hind pasterns white, foaled May 26, 1898. Bred by John Davidson, Ashburn, Ont. Exhibited by Eastwood Bros., New Toronto, Ont.; sire, Young Macqueen [2290]; dam, Flora [2520], by Linkwood Lad (imp) [1818] (8756).

Canadian-Bred Clydesdale and Shire Mares, foaled in 1905.

1st.—Blair Gowrie Lass [9062], bay, stripe, foaled June 20, 1905. Bred by Fred Richardson, Columbus, Ont. Exhibited by Smith & Richardson, Columbus, Ont.; sire, Michaboe (imp) [4256] (11434); dam, Blair Gowrie 2nd [3320], by New Day (imp) [1912] (8076).

2nd.—Burndennet Beauty [8573], bay, face, off fore and hind legs white, white spot on belly, foaled May 24, 1905. Bred and exhibited by A. G. Gormley, Unionville, Ont.; sire, Hopewell (imp) [3377] (11375); dam, Beauty (imp) [4784], by Ornament [3421] (10603).

3rd.—Kate Cornerstone [14893], brown, star, off hind leg white, foaled August 21, 1905. Bred and exhibited by John Vipond, Brooklin, Ont.; sire, Cornerstone (imp) [3505] (11016); dam, Jess Erskine [4768], by Erskine (imp) [1652] (4986).

Canadian-Bred Clydesdale and Shire Mares, foaled on or subsequent to January 1st, 1906

1st.—Baron's Queen [12985], bay, stripe, near fore ankle and hind legs white, foaled May 28, 1906. Bred by Angus Ross, Beaverton, Ont.; exhibited by Hodgkinson & Tisdale, Beaverton, Ont.; sire, Royal Baron (imp) [4722] (11161); dam, Peeress (imp) [6658] (Vol. 25, S.), by Royal Peer [5049] (11175).

2nd.—Nellie Chattan [10362], bay, face and legs white, foaled June 25, 1906. Bred and exhibited by Geo. Cowie, Markham, Ont.; sire, Gallant Chattan (imp) [4223] (12153); dam, Nellie Rosewood [3486], by Lord Wellington (imp) [2962] (6981).

3rd.—Lady Glenlivet [14333], bay, stripe, four white feet, foaled July 20, 1906. Bred by John Oke, Courtice, Ont. Exhibited by Smith & Richardson, Columbus, Ont.; sire, Glenlivet (imp) [4787] (12165); dam, Fanny Courtice [9969], by Sir Walter (imp) [1131], (8272).

Shire Stallions, foaled previous to January 1st, 1905.

1st.—Newnham Duke (imp) [343] (Vol. 23, E.), brown, star in forehead, near hind stocking white, foaled 1899. Bred by F. W. Dancer, Newnham Grange, England. Exhibited by Thos. Mercer, Markdale, Ont.; sire, Catthorpe Irving (14555); dam, Blossom (27621), by Warwickshire Hero 3rd (15418).

2nd.—Cranmore Girton (imp) [533] (23198), bay, hind legs white to hocks, white off fore fetlock, foaled 1904. Bred by Jas. Hay, Whittlesea, Cambridgeshire, England. Imported and exhibited by C. K. Geary, St. Thomas, Ont.; sire, Girton Harold (20518); dam, Ramsay Pink (Vol. 21, E.), by Kingsland Tom (17434).

3rd.—Royal King 3rd (imp) [530] (24580), brown, foaled 1904. Bred by R. Moore & Sons, Nottingham, England. Exhibited by John Gardhouse & Sons, Highfield, Ont.; sire, Royal Warrior (16043); dam, Sedate (20814), by Bar None (2388).

Shire Stallions, foaled in 1905.

1st.—Mona's Rocket (imp) [534] (25438), bay, white down face, four white legs, foaled 1905. Bred by John Parry, Llanrhyddyn, Anglesey, Wales. Exhibited by J. M. Gardhouse, Weston, Ont.; sire, Creslow Rocket (15065); dam, Ederyn Colm (53758), by Catthorpe Gold (13594).

2nd.—Government (imp) [532] (Vol. 29, E.), bay, foaled 1905. Bred by R. Moore & Sons, Nottingham, England. Exhibited by John Gardhouse & Sons, Highfield ,Ont.; sire, Calwich Legatee (21240); dam, Nottingham Constance (24440), by Nottingham Conqueror (14780).

3rd.—Sir Ralph de Willington [465], bay, stripe, near fore foot white, foaled 1905. Bred by Morris & Wellington, Fonthill, Ont.; exhibited by T. D. Elliott, Bolton, Ont.; sire, Mars (imp) [275] (17103); dam, Moulton Marianne (imp), [164] (Vol. 24, E.), by Lockinge Harold (16779).

4th.—Dominion (imp) [531] (Vol. 29, E.), bay, foaled 1905. Bred by R. Moore & Sons, Nottingham, England. Exhibited by John Gardhouse & Sons, Highfield, Ont.; sire, Calwich Legatee (21204); dam, Nottingham Eva (39788), by Merrie Andrew (18208).

Shire Stallions, foaled in 1906.

1st.—Royal Nateby [519], bay, star, hind ankles white, foaled July 10, 1906. Bred and exhibited by J. M. Gardhouse, Weston, Ont.; sire, Nateby King 3rd (imp) [420] (23537); dam, Victoria [147], by Darnley (imp) [183] (3585).

Shire Mares, foaled previous to January 1st, 1905.

1st.—Black Jewel (imp) [236] (50267), black, stripe in face, three white legs, foaled 1902. Bred by Wm. Hall, Westfield, Garstang, England. Exhibited by A. G. Clark, Alloa, Ont.; sire, Tartar 2nd (15385); dam, Daisy Cardinal (2407).

2nd.—Holdenby Nicausis (imp) [276] (Vol. 28, E.), brown, white star, white hairs on lip and nose, both hind socks white, foaled 1904. Bred by John Chambers & Sons. Holdenby, Northampton, England. Exhibited by J. Gardhouse & Sons, Highfield, Ont.; sire, Northgate Prince (15762); dam, Nicausis (33270), by Vulcan of Worsley 5th (12601).

3rd.—Lily of the Manor (imp) [338] (48538), bay, foaled 1903. Bred by J. T. Hallam, Colston, England. Exhibited by J. Gardhouse & Sons, Highfield, Ont.; sire, Stroxton Tom (15871); dam, Beauty (37975), by Willoughby Prince (14942).

4th.—Deeping Rose (imp) [315] (31678), bay, white star, four white legs, foaled 1899. Bred by C. E. Whittington, Tuxford, Newark, England. Exhibited by C. K. Geary, St. Thomas, Ont.; sire, Nailstone Cour-de-Lion (16269); dam, Safety (15552), by Bar None (2388).

5th.—Tuttlebrook Fuchsia (imp) [337] (Vol. 29, E.), grey, foaled 1903. Bred by R. Moore & Sons, Nottingham, England. Exhibited by J. Gardhouse & Sons, Highfield, Ont.; sire, Rocks Hero (15793); dam, Rempstone Dolly (Vol 29, E.), by Warwick 4th (14414).

Shire Mares, foaled on or subsequent to January 1st, 1905.

1st.—Holdenby Aura (imp) [340] (Vol. 29, S.), bay, blaze, both hind legs white. Bred by John S. Chambers & Sons, Holdenby, Northampton, England. Exhibited by C. K. Geary, St. Thomas, Ont.; sire, Rebel Chief of Hokefield (14238); dam, by Quadering Salisbury (12130).

2nd.—Spalding Belle (imp) [336] (Vol. 29, E.), bay, foaled 1905. Bred by R. Moore & Sons, Nottingham, England. Exhibited by J. Gardhouse & Sons, Highfield, Ont.; sire, Thorney Style (20098); dam, Spalding Jubilee (26914), by Aldred Prince (4204).

3rd.—Holdenby Mayflower (imp) [339] (Vol. 29, E.), chestnut, blaze, fore feet, off hind leg and inside of near hind leg white, foaled 1905. Bred by T. Roberts, Frithville, England. Exhibited by C. K. Geary, St. Thomas. Ont.; sire, Rebel Chief of Hokefield (14238); dam, Bell Smart (30795), by Highborn (11615).

4th.—Holdenby Primrose (imp) [334], brown, blaze, white stockings on both hind legs, foaled May 12, 1907. Bred by John Chambers & Son, Holdenby, Northampton, England. Exhibited by Gilbert Folliett & Sons, King, Ont.; sire, Roxwell Saxon Harold (22783); dam, Holdenby Daisy [333] (48222), by Duke of Clarence 2nd, (13001).

Hackney Stallions, 15 hands, 2 inches and over, foaled previous to January 1st, 1905.

1st.—Coveney Marmion (imp)—329—(9173), chestnut, foaled 1903. Bred by John Bays, Coveney, Mepal, Cambs, England. Imported and exhibited by Graham, Renfrew Co., Limited, Bedford Park, Ont.; sire, Witcham Marmion (8037); dam, (2943) Lady Mayoress by [Comet (1380)].

2nd.—Colorito (imp)—333—(8796), chestnut, foaled 1902. Bred by H. G. Stacey, Leeds, England. Imported and exhibited by Graham Bros., Claremont, Ont.; sire, Rosador (4964); dam, (11525) Syringa by Agility (2799).

3rd.—Crayke Mikado (imp)—334—(9167), bay, foaled 1904. Bred by S. Cliff. Exhibited by Oak Park Stock Co., Brantford, Ont.; sire, Garton Duke of Connaught (3009); dam, (13533) Halsham Topsy.

4th.—Warwick Paragon (imp)—242—(8332), chestnut, star, four white stockings, foaled 1901. Bred by John Conchar, Wylde, Green, England. Exhibited by Telfer Bros., Milton; sire, Rosador (4964); dam, (11719) Cosmic.

5th.—Atwick Astonishment (imp)—417—(9101), chestnut, face, fore legs and off hind leg white, foaled 1904. Bred by Geo. Mason Gale, Atwick, Seaton, Hull, England Imported and exhibited by T. H. Hassard, Millbrook, Ont.; sire, Atwick Jubilee (7689); dam, (4146) Lady Mary of Atwick, by Danegelt (174).

6th.—Croome Swell (imp)—348—(9540), dark chestnut, white stripe, four white ankles, foaled 1903. Bred by John Major, Croome, Stedmere, Yorks, England. Imported and exhibited by T. H. Hassard, Millbrook, Ont.; sire, Danebury (4724); dam, (11263), May Blossom, by King of Diamonds, (3705).

Hackney Stallions, under 15 hands, 2 in., foaled previous to January 1st, 1905.

1st.—King's Chocolate (imp)—342—(9291), bay, little white on face, foaled 1904. Bred by T. & C. Ross, The Limes, Hedon, Hull, England. Exhibited by A. Yeager, Simcoe, Ont.; sire, Chocolate Jr. (4185); dam, (10023) Her Majesty, by His Majesty (2513).

2nd.—Brigham Radiant (imp)—327—(9142), bay, face and leg white, foaled 1903. Bred by T. R. Stork, The Manor, Brigham, York, England. Imported and exhibited by Graham, Renfrew Co., Limited, Bedford Park, Ont.; sire, Rosador (4964); dam, (14955) Brigham Belle by Revival (7236).

3rd.—Blanche Surprise (imp)—368—(8745), dark, chestnut, white face, four white legs, foaled 1903. Bred by John Beal, North Dalton, Driffield, England. Imported and exhibited by John A. Boag & Son, Queensville, Ont.; sire, Rosador (4964); dam, (15634) Blanch Primrose, by Garton Duke of Connaught (3009).

4th.—Norbury Chiefton (imp)—416—(9361), chestnut, hind pasterns white, foaled 1902. Bred by S. B. Carnley, Norbury House Stud, Alford, Lincs, England. Imported and exhibited by T. H. Hassard, Millbrook, Ont.; sire, Lincoln Duke (6440); dam, (13810) Norbury Lily, by Lord Norbury (5697).

5th.—Cedar Conquest (imp)—349—(9155), chestnut, white face, white fore pasterns and hind legs, foaled 1904. Bred by Geo. Wilson, Cedar House, Garton, Driffield, England. Exhibited by T. H. Hassard, Millbrook, Ont.; sire, Conquest 2nd, (5560); dam, (14216) Cedar Primrose, by Revival (7236).

Hackney Stallions, foaled in 1905.

1st.—Admaston Nugget (imp)—336—(9531), chestnut, foaled 1905. Bred by Sir Gilbert Greenall, Warrington, England. Exhibited by Geo. A. Bennett & Sons, Carlisle, Ont.; sire, Goldfinder 6th, (1791); dam, (12161) Moore's Modesty.

2nd.—Royal Connaught—339—768, bay, near hind fetlock white, foaled 1905. Bred by Glendower Stock Farm, South Newbury, Vt. Exhibited by Graham Bros., Claremont, Ont.; sire, Royal Oak—313—(2667); dam, (2164) Lady Connaught, by Connaught (1453).

3rd.—Brigham Lord (imp)—414—(10018), bay, foaled 1905. Bred by T. R. Stork, The Manor, Brigham, Driffield, England. Imported and exhibited by T. D. Elliott, Bolton, Ont.; sire, Lord Derby 2nd (3092); dam, (14956), Brigham Fan, by Revival (7236).

Hackney Mares, foaled on or subsequent to January 1st, 1905.

(Age considered in awarding prizes.)

1st.—322—Saxon's Queen, chestnut roan, stripe, off fore coronet partly and near hind leg white, foaled July 30, 1905. Bred by H. N. Crossley, Rosseau, Ont. Exhibited by Graham, Renfrew Co., Ltd., Bedford Park, Ont.; sire, Saxon—97—; dam, —133—Queen of the Party, by Rosseau Performer (imp)—34—(5391).

2nd.— —346— (1495) Maid of Wawne, bay, foaled 1905. Bred by Glendower Stock Farm, South Newbury, Vt. Exhibited by T. A. Cox, Brantford, Ont.; sire, Royal Oak —313— 518 (2667); dam, (6017) Pride of Wawne.

Standard-Bred Stallions, foaled previous to January 1st, 1905.

1st.—Mograzia, 42010, bay, foaled 1903. Bred by O. J. Phelps. Exhibited by Miss K. L. Wilkes, Galt, Ont.; sire, Moko, 24457; dam, Congrazia, by Antevolo.

2nd.—Arley A, 36329, bay, foaled 1900. Exhibited by Crow & Murray, Toronto; sire, Westbrook, 7501; dam, Jenny McGregor, by McGregor Boy, 2696.

3rd.—Bingen Pilot, 40027, bay, foaled 1902. Bred by D. D. Streeter. Exhibited by Miss K. L. Wilkes, Galt, Ont.; sire, Bingen, 29567; dam, Kahla Belle, by Pilot Medium, 1597.

4th.—King's Gambit, 28120, bay, foaled 1894. Bred by Village Farm, East Aurora, N.Y. Exhibited by J. Alexander McKenzie, Presqu' Isle, Ont.; sire, Mambrino King, 1279; dam, Christine, by Onward 144.

5th.—Fritz Bingen, 62876, black, foaled 1901. Bred by J. M. Forbes. Exhibited by Jos. Swartz, Toronto; sire, Bingen, 29567; dam, Javotte, by Wilton, 5982.

6th.—The Roman, 812, bay, foaled 1897. Exhibited by Paterson Bros., East Toronto, Ont.; sire, Budd H., 676; dam, Charlotte S., by Oriole, 2297.

Standard-Bred Stallions, foaled on or subsequent to January 1st, 1905.

1st.—Peter Wilton, 42947, chestnut, foaled 1905. Bred by Patchen Wilkes' Farm, Lexington, Ky. Exhibited by Miss K. L. Wilkes, Galt, Ont.; sire, Peter the Great, 28955; dam, Mazie W., by Wilton 5982.

2nd.—Sam Bernard, 45447, bay, foaled 1905. Bred by E. L. Featherston, Lexington, Ky. Exhibited by Miss K. L. Wilkes, Galt, Ont.; sire, Bernadotte, 15608; dam, Grecca, by Artillery, 750.

3rd.—Imperial Jr., 1189, brown, foaled March 12, 1905. Exhibited by Fred Garbutt, Toronto Junction; sire, Wilfred Cecil, 34839; dam, Pall Mall, by Gimcrack, 3924.

Standard-Bred Mares, foaled on or subsequent to January 1st, 1905.

1st.—Dora Chimes, bay, foaled 1905. Bred by T. C. Stackhouse, Lexington, Ky. Exhibited by Miss K. L. Wilkes, Galt, Ont.; sire, Liberty Chimes, 28005; dam, Miss D. C., by Clay King, 2964.

Thoroughbred Stallions, foaled previous to January 1st, 1905.

1st.—Crickdale 368 (363), bay, foaled 1902. Exhibited by Crow & Murray, Toronto; sire, Lados; dam, Craig Crook, by Foxhall.

2nd.—Kapanga Horse, chestnut, aged. Exhibited by Messrs. Barbour, Toronto; sire, Spendthrift (imp); dam, Kapanga (imp).

Thoroughbred Stallions, foaled previous to January 1st, 1905. Type and conformation to produce saddle and hunting horses to be specially considered.

1st.—Halfling (imp) (172), brown, foaled 1892. Exhibited by Paterson Bros., East Toronto, Ont.; sire, Macheath; dam, Moiety, by Charibert.

2nd.—Procession, 9613, bay, 16.1, foaled 1896. Exhibited by Robert McKay, Doncaster, Ont.; sire, Order; dam, Triumph.

3rd.—Yoritomo, 29189, brown, left front and both hind feet white; foaled March 23, 1901. Exhibited by Sellers & Hall, Toronto; sire, Satsuma; dam, Lucia di Lammermoor.

Thoroughbred Stallion, foaled on or subsequent to January 1st, 1905.

1st.—St. Basset, 47368, bay, foaled March 26, 1905. Bred by J. B. Haggin. Exhibited by Jas. Bovaird, Brampton, Ont.; sire, Bassetlam; dam, Berridge, by Artillery (imp).

2nd.—Braggadocia, chestnut, star, white hind leg. Exhibited by Chas. E. Ray, Toronto; sire, Pirate of Penzance; dam, Pea Vine.

3rd.—New Guile, 46611, bay, two white feet. Exhibited by Power Bros., Toronto; sire, Beguile; dam, Violent.

4th.—Stone King, bay. Exhibited by Power Bros., Toronto; sire, Kapanga; dam, Primrose Dame.

Shetland Pony Stallions, any age.

1st.—Goldfinder —Vol. 15— black. Exhibited by Frank Gillies, Toronto.
2nd.—Lord Minto —5275—, brown, foaled July 7, 1903. Bred by Geo. Cassie Exhibited by F. Du V. Elliott, Toronto; sire, Vermont Dewey —5269—; dam, Nina —2700—.
3rd.—Spider. Exhibited by Reg. D. Meade, Scarboro Junction.

Shetland Pony Mares, any age.

1st.—Nipsie. Exhibited by Alfred Rogers, Jr., Deer Park.
2nd.—Dolly, black. Exhibited by Langton Bros., Toronto.
3rd.—Balmanno Queen, —Vol. 15—, black. Exhibited by Frank Gillies, Toronto.
4th.—Dolly, exhibited by Reg. D. Meade, Scarboro Junction.
5th.—Queenie, black. Exhibited by W. H. Meade, Toronto.

Pony Stallions, any age, any breed other than Shetland, 14 hands, 1 inch and under.

1st.—Plymouth Horace (imp) —305— (8969) (Hackney), bay, foaled 1903. Bred by Sir Gilbert Greenall, Walton Hall, England. Exhibited by Graham, Renfrew Co., Limited, Bedford Park, Ont.; sire, Sir Horace (5402); dam (4117) Lady Kate.
2nd.—Royal Review (imp) (10033) (Hackney). Exhibited by T H Hassard, Millbrook.

Pony Mares, any age, any breed other than Shetland, 14 hands, 1 inch and under.

1st.—Berkeley Elegance. Exhibited by T. A. Cox, Brantford.
2nd.—Minnie. Exhibited by W. R. Mead, Norway; sire, [Royal Standard —55—]; dam, [Royal Lady (379)].
3rd.—(18828) Julia Marjorie (imp) (Hackney). Exhibited by Andrew Aitcheson, Guelph, Ont.
4th.— —326— 1575, Hillhurst Bonnie (Hackney), seal brown, black points in front, hind fotlocks white, foaled September 15th, 1901. Bred by Jas. A. Cochrane, Hillhurst, Que. Exhibited by C. E. Gudewill, Montreal; sire, Cobhurst —296— 388; dam, (Lady Frances —50— 132 F. S.).
5th.—Little Clip (imp) (Hackney). Exhibited by T. H. Hassard, Millbrook, Ont.

Heavy Draught Geldings or Mares, shown in harness, three years old and over, to be sired by either a registered Clydesdale or Shire Stallion. Registered name and number of sire to be given with entry.

1st.—The Masher. Exhibited by Graham Bros., Claremont, Ont.; sire, Boreland Chief (imp) [7851] (13378).
2nd.—Bright Joe. Exhibited by E. Dingman, V.S., Maplewood, Ont.; sire, Joe Anderson, (imp) [1742].
3rd.—Paddy, bay. Exhibited by Smith & Richardson, Columbus, Ont.; sire, Lord Lieutenant (imp) [975] (4529).
4th.—Prince, bay, 6 years. Exhibited by Smith & Richardson, Columbus, Ont.; sire, The Archer (imp) [1259] (4051).
5th.—Charlie, bay gelding, 7 years. Exhibited by the Dominion Transport Co., Toronto; sire, Royal Huntley (imp) [2432].
6th.—Sir William. Exhibited by the Dominion Transport Co., Toronto; sire, Golden Victor (imp) [3814] (11056).
7th.—Tom, bay gelding, face and hind legs white, foaled in 1904. Exhibited by J. W. Cowie, Markham, Ont.; sire, Harmony (imp) [2951].

Single Horses, Geldings or Mares, shown on a line, bred in Canada and the property of persons actually engaged in farming or agricultural pursuits only, and owned by the exhibitor previous to January 1st, 1908. To be sired by a registered Clydesdale or Shire Stallion. Registered name and number of sire to be given with entry.

1st.—Bright Joe. Exhibited by E. Dingman, Maplewood, Ont.; sire, Joe Anderson (imp) [1742].
2nd.—Paddy, bay. Exhibited by Smith & Richardson, Columbus, Ont.; sire, Lord Lieutenant (imp) [975] (4529).
3rd.—Prince. Exhibited by Smith & Richardson, Columbus, Ont.; sire, The Archer (imp) [1259] (4051).

4th.—Tom, bay; sire, Harmony (imp) [2951]. Exhibited by J. W. Cowie, Markham, Ont.

5th.—Grasmere Jessie [6291]; sire Pedestrian (imp) [4900] (11450). Exhibited by J. W. Cowie, Markham.

6th.—Gipsy of Guelph [2315], brown, star on forehead, right front and off hind feet white, foaled 1896. Bred by D. & O. Sorby, Guelph, Ont. Exhibited by Eastwood Bros., New Toronto; sire, Grandeur (imp) [1724] (6814); dam, Venus (imp) [2069], by Queen's Own (imp) [1708] (7176).

7th.—Nellie Balmanno [13369], dark bay, face and hind fetlocks white, foaled April 23, 1904. Bred by Thomas Armstrong, L'Amaroux, Ont. Exhibited by David Howard, Amber; sire, Balmanno (imp) [3703] (10676); dam, Rose of Pine Grove [13368], by Pedestrian (imp) [4900] (11450).

Heavy Draught Team, in harness, geldings or mares, to be sired by a registered Clydesdale or Shire. Registered name and number of sire to be given with entry.

1st.—Prince, bay; sire, The Archer (imp) [1259] (4051). Paddy, bay; sire, Lord Lieutenant (imp) [975] (4529). Exhibited by Smith & Richardson, Columbus, Ont.

2nd.—Charlie, bay gelding; sire, Royal Huntley (imp) [2432]. Sir William; sire, Golden Victor (imp) [3814] (11056). Exhibited by the Dominion Transport Co., Toronto.

3rd.—Bob, bay gelding; sire, Granite [1913].

Gamey, bay gelding; sire, Sir Arthur (imp) [3154] (10455). Exhibited by Jos. Russell, Toronto.

4th. Tom, bay; sire, Harmony (imp) [2951].

Grasmere Jessie [6291]; sire, Pedestrian (imp) [4900] (11450). Exhibited by J. W. Cowie, Markham.

CHAMPIONSHIPS.

Clydedsdale Stallions, any age.

1st.—Baron Howes (imp) [7850] (13463). Exhibited by Graham, Renfrew Co., Ltd., Bedford Park, Ont.

Clydesdale Mare, any age.

1st.—Floshend Princess (imp) [13788] (18613). Exhibited by Smith & Richardson, Columbus, Ont.

Shire Stallion, any age.

1st.—Newnham Duke (imp) [343] (Vol. 23, E.). Exhibited by Thos. Mercer, Markdale.

Shire Mare, any age.

1st.—Black Jewel (imp) [236] (50267). Exhibited by A. G. Clark, Alloa, Ont.

Hackney Stallion, any age.

1st.—King's Chocolate (imp) —342— (9291). Exhibited by A. Yeager, Simcoe, Ont.

Standard-Bred Stallion, any age.

1st.—Mograzia, 42010, bay, foaled 1903. Exhibited by Miss K. L Wilkes, Galt, Ont.

Thoroughbred Stallion, any age.

1st.—St. Basset, 47368, bay, foaled March 26, 1905. Exhibited by Jas. Boviard, Brampton.

Pony Stallion, any age.

1st.—Plymouth Horace (imp) —305— (8969) (Hackney). Exhibited by Graham, Renfrew Co., Ltd., Bedford Park, Ont.

Pony Mare, any age.

1st.—Berkeley Elegance. Exhibited by T. A. Cox, Brantford.

MEMBERS OF THE ONTARIO HORSE BREEDERS' ASSOCIATION FOR 1908.

Canadian Hackney Horse Society.

Beith, Hon. R., Bowmanville.
Boag & Son, John A., Ravenshoe.
Graham Bros., Claremont.
Hassard, T. H., Millbrook.
Hogate, J. B., Weston.
Mercer, Thos., Markdale.
Hodgkinson & Tisdale, Beaverton.
Sorby, O., Guelph.
Spencley, H. J., Box Grove.

Canadian Shire Horse Association.

Breckon, John, Appleby.
Burr, John F., Waubuno.
Cornell, Geo., Lyn.
Drury, Frank, Charing Cross.
Gardhouse, J. M., Weston.
Gardhouse & Sons, John, Highfield.
Geary, C. K., St. Thomas.
Hogate, J. B., Weston.
Laking, Wm., Haliburton.
Morris & Wellington, Fonthill.
Neil & Son, F. H., Lucan.

Canadian Clydesdale Horse Association.

Adams, Chas. A., Brantford.
Agar, Robert, Nashville.
Augustus, C., Brooklin.
Aitcheson, Andrew, Guelph.
Alsop, Jos., Glasgow.
Alton & Son, A. P., Appleby.
Anderson, Jas. T., Kincardine.
Annan, Andrew, Dunbarton.
Annet, W. B., Walnut.
Annis, Edward, Solina.
Annis, Geo. F., Courtice.
Armstrong, John, Motherwell.
Armstrong, Robert, Strongville.
Armstrong, Thos., L'Amaroux.
Armstrong, T. H., Kinburn.
Ashford, Jas E., Ryckman's Corners.
Baker, Allan, Alberton.
Baker, Thos., Solina.
Bawden & McDonell, Exeter.
Bean & Son, Chas., Brinsley.
Beare, John S., Cedar Grove.
Beattie, J. J., Mt. Brydges.
Begg, W. A., Tiverton.
Beith, Hon. Robert, Bowmanville.
Bell, Wm., Avonton.
Bell, W. M., Springford.
Bennett, C. R., Russelton.
Bennett, Delvert, Russelton.
Boag, A. W., Queensville.
Boag, H. G., Barrie.
Boag & Son, John A., Ravenshoe.
Bond, S., Columbus.
Boules, Levi S., Springville.
Boyes, Jr., John, Churchill.
Bracken, Thos. H., Orangeville.
Brady, Thos., Chatham.
Bright, John, Myrtle Station.
Bright, Wm., Raglan.
Brodie, Geo. A., Bethesda.
Brown, A. C., Epsom.
Brown, L. A., Fergus.
Brown, Wm., Milliken.
Bunker, S. C., Pickering.
Burgess, Wellington, Norwood.
Burke, T. W., South March.
Burnett, Jos., Elgin Mills.
Burnett, Wm. R., Markdale.
Burns, David, Brooklin.
Butler, W. E., Ingersoll.
Cairns, Thos., Dublin.
Cameron, C., Etobicoke.
Cameron, J. Robinson, Hamilton.
Campbell, Jas., Belwood.
Campbell, John, Harriston.
Campbell Bros., Alvinston.
Cargill & Son, H., Cargill.
Carstairs, D., Bomanton.
Chapman Bros., Kirby.
Charlton, E. W. & G., Dunerief.
Christie, Peter, Manchester.
Cinnamon, John, Oshawa.
Clark, J. L., Norval.
Clemens, A. E., Tyrone.
Cole, W. R., Tyrone.
Colquhoun, Wm., Mitchell.
Columbus, D., Jarvis.
Cooper, Wm., Fergus.
Cordiner, John, Ennotville.
Cossins, Robert, Whitby.
Coursey, T. & C. H., Lucan.
Cowie, G. R., Markham.
Cowie, J. W., Markham.
Cowie, R. B., Derryville.
Cox, Robert, Amber.
Cox, Robert, Huntley.
Coyte & Sons, T., Port Hope.
Crago, F. A., Bowmanville.
Craven, John, Brinsley.
Crawford, Geo., Oro Station.
Crawford Bros., Brown's Corners.
Culbert, Wesley, Saintsbury.
Dalgety Bros., London.
Davidson, Geo., Orono.
Davidson, Jas., Avonton.
Davidson & Son, Geo., Cherrywood.
Davies, Robert, Toronto.
Devitt & Sons, I., Freeman.
Dickieson & Son, R., Guelph.
Dickson Bros., Atwood.
Dingman, W. J., Balsam.

Disney & Son, J. E., Greenwood.
Dix W. A., Fergus.
Doble, Wm. L., Sunderland.
Doig, Peter F., Fordwich.
Downing, H., Simcoe.
Doyle Bros., Mt. Carmel.
Duncan Thos. G., Woodford.
Dundas, R. D., Springville.
Eaid, Chas. E., Simcoe.
Eadie, J. D., Vars.
Eadie, J. R., Russell.
Elliott, J. F., Oxford Centre.
Elmore, Edward, Ekfrid.
Esdon, J. H., Bainsville.
Fairbairn, B., Sharon.
Faris, W. J., Bradford.
Faulds, W. M., Muncey.
Ferguson, Alex., Sonya.
Ficht, Val., Oriel.
Flood, Daniel, Elginfield.
Follis, John, Ashley.
Ford, Geo. D., Galt.
Forgie, John, Claremont.
Forsyth, G. M., North Claremont.
Fraser, W. G. S., Parkhill.
Fry, Henry, Nobleton.
Fuller, Edward, Mitchell.
Garbutt, Geo., Tullamore.
Gardhouse, J. M., Weston.
Gillis, John, Marden.
Gleeson, Jas. J., Markham.
Gordon, John, Brooklin.
Gormley, A. G., Unionville.
Graham, Geo., Weidman.
Graham, John, Derry West.
Graham, John, Udora.
Graham Bros., Claremont.
Graham, T. J., Uxbridge.
Graham & Renfrew, Bedford Park.
Grant, R. H., Hazeldean.
Grant, Ryerson M., Bradford.
Grant, Wm., Markham.
Gray, Wm., Mayfield.
Gray, Jos. & Wm., Londesboro.
Greenlees, Hugh, Bowmanville.
Gregg, Thos., Claremont.
Groat, Chas., Brooklin.
Grundy, R., Clandeboye.
Gunn & Son, D., Beaverton.
Hahn Bros., Hawkesville.
Hales, Jas. J., Chatham.
Hall, Nelson, Rockford.
Hall, Wm. A., Birnam.
Hamilton, Angus, Ravenshoe.
Hamilton, John, Lisgar.
Hand, Jas., Tancred.
Hanlon, Henry, Rayside.
Harris, Wm., Cattle Market Annex, Toronto.
Hartin, Chas., Stittsville.
Hassard, T. H., Millbrook.
Halmkay, W., Armadale.
Henderson, Geo., Keady.
Henderson, Jas., Belton.
Herold, P., Tavistock.
Hogate, J. B., Weston.
Holtby, J. W., Manchester.
Holtby, R. M., Manchester.
Holtby, W. W., Manchester.
Hoover, Isaiah, Stouffville.
Hosken, A. E., Cobourg.
Howard & Son, J. W., Amber.
Howitt, Jas., Altona.
Hume & Co., A., Menie.
Hummason, Fred, Embro.
Hutchison, John, Millbrook.
Innes, Alex., Brooksdale.
Innes, Alex., Clinton.
Innes, Jas. W., Woodstock.
Ironside, H. W., Puslinch.
Isaac, Alex., Cobourg.
Jackson, Henry W., Glen Allen.
Jackson, Richard, Alma.
Jackson & Son, Geo., Downsview.
Jewell, W. E., Bowmanville.
Johnston, Arthur, Greenwood.
Johnston, John, Cobblehill.
Johnston, J. R., Springford.
Kelly, Jas., Fairview.
Kennedy Bros., Marden.
Kent, Robert, Embro.
King, Marmaduke, Fingerboard.
Kissock, Samuel, Guthrie.
Knox, Andrew, Tuscarora.
Lamb, Geo. H., Tancred.
Larkin, John D., Queenston.
Lavin & Richardson, Harriston.
Law & Son, Wm., Ringwood.
Lawrie, John, Malvern.
Leahy, Wm., Sunderland.
Leathers, W., Bethesda.
Lehman, A. B., Atha.
Leonard, Walter, Craigvale.
Lester, Ellery, Forest.
Lindsay, Jas. A., Fergus.
Lougheed, H. P., Heathcote.
Lowes, J. W., Bethany.
McAlpine, Angus A., Eddy's Mills.
McAvoy, C. C., Atha.
McBrine, R., Chatsworth.
McCabe, J. A., Collingwood.
McCaig, Alex., Aberfoyle.
McCowan, Jas., Brown's Corners.
McDiarmid, P. A., Alvinston.
McDonald Bros., Woodstock.
McEachran & Son, P. R., Eldon.
McEachran, R., Argyle.
McElheron, Neil, Chatsworth.
McFarlane, Jas., Claremont.
McGeachy, D. & R., Coleraine.
McGregor, Alex., Uxbridge.
McIntyre, Alex., Cathcart.
McKay, Hugh, Embro.
McKeigan, Colin, Strathroy.
McKenzie, John, Chatsworth.
McKinnon, G., Unionville.
McLevin, John, Hickson.
McMillan, John, North Keppel.
McMillan, R. J., Seaforth.
McNeilage, Jas., Eberts.
McNiven, Alex. F., St. Thomas.
McPhail, Neil, Sonya.
McTaggart, Jas., Sonya.
McTavish, Alex., Shakespeare.
McTavish, John, Shakespeare.
McVey, J. F., Metcalfe.
Mackintosh, Wm., Burgoyne.
Mair, Jas., Peabody.

Major Bros., Whitevale.
Maloney, Patrick, Metropolitan.
Mason, Leslie, L'Amaroux.
Matthewson, J., Brooklin.
Maxwell, Jas., Locust Hill.
Magill, Chas. L., Aurora.
Meharey, Wm., Russell.
Menzies, J. A. Wingham.
Mercer, Thos., Markdale.
Meyer, Frederick, Bethesda.
Meyers, Jacob S., St. Clements.
Middleton, G. & W., Claremont.
Miller, John J., Gowrie.
Milne & Son, R., Green River.
Milroy & Son, John, Cedar Grove.
Mitchell, J. B., Whitby.
Mitchell, Robert, Ivan.
Moffatt, R. N., Fenelon Falls.
Montague, N. C., Jarvis.
Moore, T. J., Kilsyth.
More, Jas., Kirkton.
Morrison, Peter, Argyle.
Mossip, Wm., St. Mary's.
Mountjoy, F., Enfield.
Munro, J. A., Argyle.
Murison, Jas., Cedar Grove.
Murta, J. J., Uxbridge.
Myles, C. E., Bedford Park.
Neil & Sons, F. H., Lucan.
Noyes, Wm., Denfield.
Oliver, W. R., Cobourg.
Osborne, T. C., Whithy.
Palmer, D. R., Thorndale.
Paton, Jas., Swinton Park.
Patterson, Ed., Norwood.
Patterson, John W., Denfield.
Patterson Bros., Millbrook.
Paxton, P. G., Tottenham.
Payton, Bernard, Conroy.
Peterson, Alex, Hawkesville.
Pettit, R., Glen Willow.
Pettit & Sons, Freeman.
Pinkerton, D., Pinkerton.
Power, Truman, Bowmanville.
Prouse, S. J., Ingersoll.
Quinlan, David, Ennismore.
Reid & Co., R., Hintonburg.
Reynolds, Fred., Enfield.
Richardson, Fred, Columbus.
Richardson, Jas., St. Paul's Station.
Richardson, F. P., Columbus.
Richardson, Wm. P., Columbus.
Roadhouse, Silas, Comber.
Robinson, Wm., Markham.
Robinson & Sons, Mrs. J. W., St. Mary's.
Robson, Jos., Telfer.
Ross, Dugald, Streetsville.
Rock, Thos., South March.
Ross, J. C., Jarvis.
Ross Bros., Nairn.
Rothwell, B., Ottawa.
Rundle, D., Sonya.
Schaefer, H., Maplewood.
Scharf, A., Cumming's Bridge.
Schell, M. & W., Woodstock.
Scott, Francis, Twin Elm.
Semple, Hugh, Hereward.
Sewell, David, Cedar Grove.
Sharpe, T. H., Brampton.
Shaw, Philip, Medina.
Shields, J. B., Mt. Albert.
Shier, R., Cannington.
Sleightholm, J. A., Humber.
Sluggett, J. W., Mount Horeb.
Smart, Jas., Beeton.
Smillie, A. G., Hensall.
Smillie, B., Hensall.
Smith, L. J., Manchester.
Smith, Neil, Brampton.
Smith, Robert B., Columbus.
Smith & Richardson, Columbus.
Sorby, O., Guelph.
Spearin, George, St. Mary's.
Sproule, Newton H., Schomberg.
Staples, Geo., Lifford.
Staples, Jos. F., Ida.
Stewart, John, Springbank.
Stewart, R., Winfield.
Stocks & Sons, Jas., Columbus.
Story, R & Son, Crossland.
Stringer, Abe., Kingarf.
Tape, Frank, Highgate.
Taylor, Anson, Blackstock.
Taylor, Geo. B., Middleville.
Taylor, L. W., Stayner.
Taylor, Wm., Baldwin.
Thompson, John, Belwood.
Thompson, N., Orangeville.
Tingle, Geo. A., Ellesmere.
Trachsell, Fred, Shakespeare.
Tran, W. H., Cedar Grove.
Tremble, Geo., Bowmanville.
Trick, R., Unionville.
Trott & Son, Ed., Christina.
Underhill, Jas., Claremont.
Vance, David, Tavistock.
Wagester, Wm., Tavistock.
Wagg, Jas., Stouffville.
Wagg, Nelson, Claremont.
Waldbrook, Wm., Hagersville.
Wallace, Geo. A., Ponsonby.
Walton, Guy, Ellesmere.
Ward, Edward, Greenbank
Warner, Peter, Homer.
Watt, Robert, South March.
Watt, R. A. & J. A., Salem.
Way, R. G., Trenton.
Webster, Jas., Oakwood.
Wells, A. B., King.
White, Geo., St. Mary's
White, Job., Ashburn.
White, T. & S., Birr.
Whetstone, Jos., Kintore.
Wilkin, W. G., Harriston.
Wilson, Jas. A., Elginfield.
Wood, T. A., Bradford.
Woodill, Wm., Woodhill.
Woodley, Wm., Dundas.
Woodward, Thos., Derryville.
Wyckoff, J. G., & E. L., Tyrell.
Young, W. H., Binkham.
Young & Son, Wm., Mt. Brydges

APPENDIX.

PRIZE WINNERS AT ONTARIO PROVINCIAL WINTER FAIR, GUELPH, 1907.

CATTLE.

SHORTHORNS.

Steer, 2 years and under 3. Two entries.

1st.—J. & D. J. Campbell, Woodville. Fairview Prince, Sept. 20th, 1904. Sire, Golden Count 44787; dam, Rose Blossom 40516.

2nd.—John Barr, Blyth. Blyth Lad, November, 1904. Sire, Silver Plate, 40203; dam, Lady Sylvian Vol. XVII.

Steer, 1 year and under 2. Four entries.

1st.—John Brown & Sons, Galt. Allison, Sept. 2nd, 1905. Sire, Royal Stewart, 46037; dam, Miss Blake 34327.

2nd.—W. R. Elliott & Sons, Guelph. White Sailor, Dec. 2nd, 1905. Sire, Merry Sailor 40764; dam, Florence of Hurricane Hill 50089.

3rd.—Alfred Farron, Speedside. Pretty Sailor, Feb 20th, 1906. Sire, Merry Sailor, 40764; dam, Rosena of Hurricane Hill, Vol. XXI.

4th.—John Brown & Sons. White Ribbon, Feb. 12th, 1906. Sire, Crimson Ribbon 40918; dam, Valman of White House 57439.

Steer, under 1 year. Four entries.

1st.—W. R. Elliott & Sons. White Hero, Dec. 2nd, 1906. Sire, Scottish Hero (imp) 55042; dam, Matchless of Mapleton 2nd, 53648.

2nd.—Alex. McKinnon, Coningsby. Crimson Rambler, Sept. 20th, 1906. Sire, Crimson Ribbon 40918; dam, Grace Reynolds 51961.

3rd.—John Currie, Eramosa. Senator's Victor, Nov. 1st, 1906. Sire, Senator's Pride 60760; dam, Lady Barrington 53101.

4th.—John Brown & Sons. Gold Coin, Dec., 1906. Sire, Gold Mint 58477; dam, Lady Roan 80943.

Cow or Heifer, 3 years or over. Seven entries.

1st.—John Brown & Sons. Lady Hampton 54213, April 28th, 1903. Sire, Merry Hampton 50060 (73063); dam, Monarch's Lady, 55705.

2nd.—I. & A. Groff, Alma. Queen Jewel 64090, Dec. 6th, 1902. Sire, Red Duke (imp) 36084; dam, Queen's Diamond 46939.

3rd.—Barber & Aitcheson, Guelph. Dalmeny Fanny 6th (imp) 48411, March 7th, 1901. Sire, Ramulus of Dalmeny (77677); dam, Dalmeny Fanny 5th.

4th.—Barber & Aitcheson. Nonpareil Lady 59560, Aug. 15th, 1903. Sire, Nonpareil Archer 45202; dam, Emmeline 9th (imp) 48555.

Heifer, 2 years and under 3. Three entries.

1st.—Geo. Amos & Son, Moffatt. Flora 90th, 70130, March 28th, 1905. Sire, Old Lancaster 50068; dam, Scotch Lassie 24583.

2nd.—John Brown & Sons. Lancaster Pearl, 70133, June 27th, 1905. Sire, Old Lancaster (imp), 50068; dam, Mabel of Knowhead (imp) 48447.

3rd.—John Barr. Jennett H. 5th, 81061, Aug. 20th, 1905. Sire, Silver Plate 40203; dam, Jennet, Vol. XVI.

Heifer, under 2 years. Three entries.

1st.—G. & W. Parkinson, Eramosa. Hannah 80885, Jan. 1st, 1906. Sire, Royal Wonder 2nd, 49776; dam, Bertha's Pet 52231.

2nd.—Geo. Amos & Son. Lady Mysie 74828, Jan. 8th, 1906. Sire, Old Lancaster 50068; dam, Belwood Mysie 48849.

Best Shorthorn Steer.

1st.—John Brown & Sons, Galt.

HEREFORD AND ABERDEEN-ANGUS.

Steer or Heifer, 2 years and under 3. Three entries.

1st.—James Bowman, Guelph. Elm Park Keepsake 4th—1658—, Dec. 26th, 1904. Sire, Prince of Benton 58632; dam, E. P. Kyma 14, 63338.

2nd.—R. W. McKinnon, Coningsby. Patti of Whitehouse 95356, Sept. 16th, 1904. Sire, Prince Bate 60751. dam, Patti of Tweedhill 2, 46200.

3rd.—John A. Govenlock, Forest. Pansy 3903, Sept. 17th, 1904. Sire, Imperial 2034; Julia 1911.

Steer or Heifer, 1 year and under 2. Three entries.

1st.—James Bowman. Elm Park Beauty 3rd 1627, Oct. 17, 1905. Sire, Elm Park Kaiser 72537; dam, Belle of Delaval 2nd (imp) 53459.

2nd.—H. McDougall, Guelph. Off Color, Nov. 9th, 1905. Sire, Encroacher 74746; dam, Blooming Rose 2 —40483—.

3rd.—John A. Govenlock. Little Beauty (5569), Nov. 13th, 1905. Sire, Imperial 2034; dam, Little Beauty 2099.

Steer or Heifer, under 1 year. Three entries.

1st.—James Bowman. Elm Park Beauty 4th —1852—, Sept., 22nd, 1906. Sire, Elm Park Raider —1639—; dam, Belle of Delaval 2nd (imp) 53459.

2nd.—John A. Govenlock. Sunshine (6554), Oct. 25th, 1906. Sire, Imperial 2034; dam, Little Beauty 2099.

3rd.—Peter A. Thomson, Hillsburg. Beauty 4th, 103644, Dec. 26th, 1906. Sire Prince of Kenilworth 82944; dam, Culentrack Beauty 3rd, 71329.

Cow or Heifer, 3 years and over. Three entries.

1st.—Walter Hall, Washington. Newton 5, 45810, Nov. 3rd, 1900. Sire, Laird of Tweedhill, 29486; dam, Newtona 12903.

2nd.—John A. Govenlock. Forest Lady 1437, April 5th, 1899. Sire, Lambton's Pride 912; dam, Delilah 3rd, 279.

3rd.—James Bowman. Elm Park Mayflower 3rd —1646—, Nov. 14, 1900. Sire, Kyma's Heir 24835; dam, Kyma of Tweedhill 17606.

GALLOWAYS AND DEVONS.

Steer or Heifer, 2 years and under 3.

1st.—C. C. Rudd, Eden Mills. O. K., May, 1905. Sire, Welsh Pete 7344; dam, Ella 1128.

Steer or Heifer under 1 year.

1st.—D. McCrae, Guelph. Cally —1657—, Oct. 26, 1906. Sire, Royal Ensign —1305—: dam, Celinda —1368—.

Cow or Heifer, 3 years and over. Four entries.

1st.—D. McCrae, Semiraraus 36, 1345. Sire, C. Borderer 5945; dam, Semiraraus 26, 12792.

2nd.—Barber & Aitcheson, Guelph. College Best 1548, Feb. 13th, 1899.

3rd.—C. C. Rudd. Dot 1189, Aug., 1904. Sire, Welsh Pete 7344; dam, Ruby 2nd, 1178.

GRADES OR CROSSES.

Steer, 2 years and under 3. Three entries.

1st.—James Leask, Greenbank. Clinker, March 26, 1905. Sire, King of Banff 45188.

2nd.—J. & D. J. Campbell, Woodville. Barney, March 15th, 1905. Sire, Golden Count 44787.

3rd.—John Brown & Sons. Captain, June 5th, 1905. Sire, Ross 61968.

Steer, 1 year and under 2. Five entries.

1st.—Jos Stone, Sr., Saintfield. Ike, Sept. 3rd, 1905. Sire, C. Archer 39466.

2nd.—Jos. Stone, Sr. Jimmie, March 4th, 1906. Sire, R. Duke 48960.

3rd.—John Barr. White Star, Oct. 2nd, 1905. Sire, Silver Plate 40203.

4th.—Peter A. Thomson. Kenilworth, Jan. 12th, 1906. Sire, Fair Boy of Willow Grove 58936.

5th.—Wm. J. McKerracher, Harwich. Norman, June 15th, 1906. Sire, "Camel" 37675.

Steer, under 1 year. Six entries.

1st.—Kyle Bros., Ayr. Chancellor's Stamp, Sept. 17th, 1906. Sire Bapton Chancellor 40359 (78286).
2nd.—Jos. Stone. Champion, Sept. 6th, 1906. Sire, Archer 56070.
3rd.—John Lowe, Elora. Black Hector, Sept. 10th, 1906. Sire, Elm Park Ringleader 72541.
4th.—James Leask. Roan Jim, Nov. 16th, 1906. Sire, Gloster's Choice 45238.
5th.—John McIntyre, Ridgetown. Red Prince, Oct. 28th, 1907. Sire, Early Morning 58701.

Cow or Heifer, 3 years or over. Two entries.

1st.—John Barr. Rosy Jane. Aug., 1904. Sire, Silver Plate, 40203.
2nd.—James Leask. Cherry, February, 1903.

Heifer, 2 years and under 3. Two entries.

1st.—James Leask. Princess, January 4th, 1905. Sire, King of Banff 45188.
2nd.—C. C. Rudd. Bella. Sept., 1904. Sire, Welsh Pete, 7344.

Heifer, under 2 years. Four entries.

1st.—Peter Stewart, Everton. Red Beauty, Sept. 3rd, 1905. Sire, College Senator 46048.
2nd.—James Leask. Red Lady, December, 1905. Sire, Gloster Choice 45238.
3rd.—G. & W. Parkinson. Roan Bell. Nov. 25th, 1905. Sire, A Son of Golden Prince 41108.
4th.—John Brown & Sons. Sparkle, Sept., 1905.

Three Export Steers. Four entries.

1st.—John Brown & Sons.
2nd.—James Leask.
3rd.—John Brown & Sons.
4th.—James Bowman.

Grand Championship. Best Beef Animal.

1st.—John Brown & Sons, Galt.

Dressed Carcasses.

Pure-Breds. Five entries.

1st.—H. McDougall. Off Color (Aberdeen-Angus).
2nd.—W. R. Elliott & Sons. White Sailor (Shorthorn).
3rd.—Barber & Aitcheson. Duchess of Gloster 53rd, (Shorthorn).
4th.—C. C. Rudd. O. K. (Devon).

Grades or Crosses. Three Entries.

1st.—Wm. J. McKerracher. Norman (Grade Shorthorn).
2nd.—James Bowman.
3rd.—C. C. Rudd. Bella (Grade Devon).

Best Export Steer. Special.

1st.—John Brown & Sons.

Grade Steer or Heifer, Sired by Pure-Bred Aberdeen-Angus Bull. Special.

1st.—John Lowe.
2nd.—John Brown & Sons.
3rd.—John Brown & Sons.
4th.—James Bowman.

Steer or Heifer, Sired by Registered Hereford Bull. Special.

1st.—John Brown & Sons.

Grade Steer, Sired by Pure-Bred Shorthorn Bull. Special.

1st.—Jos. Stone, Sr.
2nd.—Kyle Bros., Ayr.
3rd.—James Leask.
4th.—J. & D. J. Campbell.

Grade Steer or Heifer, fed in County of Wellington, and owned by Exhibitor at least Three Months previous to Show. Special.

1st.—John Lowe, Elora.
2nd.—Peter Stewart, Everton.

SHEEP.

Cotswolds.

Ewe, under 1 year. Ten entries.

1st.—Rawlings & Bailey Forest. Rawlings 1272, 44255, Spring 1907. Sire, Thompson 1247, 35171; Locke 133, 37053.

2nd.—John Sockett, Rockwood. Sockett's 263, 45256, Spring 1907. Sire, Slater's 198, 36098; dam, Sockett's 11, 27920.

3rd.—Rawlings & Bailey Rawlings 1400, 44491, Spring 1907. Sire, Rawlings 910, 35181; dam, Kennedy 164, 27024.

4th.—John Sockett. Sockett's 265, 45258, Spring 1907. sire, Slater's 198, 36098; dam, Sockett's 143, 31685.

5th.—Rawlings & Bailey. Rawlings 1312, 44293, Spring 1907. Sire, Vickery 24 37599; dam, Rawlings 883, 31456.

Three Ewes under 1 year. Four entries.

1st.—Rawlings & Bailey. 2nd.—John Sockett. 3rd.— Rawlings and Bailey.

Wether, 1 year and under 2. Five entries.

1st.—Rawlings & Bailey. (————), Spring 1906. Sire, Garne 56, 24808; dam, Bailey 230, 33081.

2nd.—E. Brien & Son, Ridgetown. Brien C., March, 1906. Sire, Snell's 882, 31988 dam, Brien's 12, 22254.

3rd.— E. Brien & Son. Brien A., March, 1906. Sire, Snell's 882, 31988; dam, Brien's 14, 22256.

4th.—E. Brien & Son. Brien B., March, 1906. Sire, Snell's 882, 31988; dam, Brien's 14, 22256.

5th.—John Sockett. Sockett's 101, 1906. Sire, R. P. Snell's 975, 31625; dam, Sockett's 79, 23750.

Wether, under 1 year. Nine entries.

1st. E Brien & Sons. Brien F., March, 1907 Sire, Barrett's 11, 36674; dam, Brien's 37, 27187.

2nd.—Rawlings & Bailey. (————) Spring 1907; sire, Rawlings 910, 35181; dam, Cuddy 20, 28753.

3rd.—W. E. Wright, Glanworth. Wright's 649, 1907; sire, Rawlings, 1179, 40557; dam, Laidlaw's 424, 30988.

4th.—E. Brien & Son. Brien D., March, 1907. Sire, Barrett's 11, 36674; dam, Brien's 18, 22260.

5th.—E. Brien & Son. Brien's E., March, 1907. Sire, Barrett's 11, 36674; dam, Brien's 18, 22260.

Three Wethers under 1 year. Four entries.

1st.—E. Brien & Son.
2nd.—E. Brien & Son.
3rd.—Rawlings & Bailey.
4th.—John Sockett.

Best Wether under 2 years.

1st.— Rawlings & Bailey.

Cotswold Dressed Carcasses.

Wether, 1 year and under 2. Five entries.

1st.—E. Brien & Son
2nd.—John Sockett.
3rd.- E. Brien & Son.
4th.—E. Brien & Son.
5th —Rawlings & Bailey.

Wether, under 1 year. Eight entries.

1st.—E. Brien & Son.
2nd.—E. Brien & Son.
3rd.—Rawlings & Bailey.
4th.—Rawlings & Bailey.
5th.—E. Brien & Son.

Lincolns.

Ewe, under 1 year. Nine entries.

1st.- J. T. Gibson, Denfield. Gibson's 382, 16112, 1907. Sire, Dean's 4, 11963; dam, Gibson's 294, 13357.

2nd.—J. H. Patrick, Ilderton. Patrick No. 1, Spring 1907; sire, Pears Choice (imp) 15672; dam, Kirkham 232, 7583.

3rd.—L. Parkinson, Eramosa. Parkinson's 426, 16942, Spring 1907. Sire, Byran's 9474; dam, Parkinson's 408, 12511.

4th.—J. T. Gibson. Gibson's 379, 16109, 1907. Sire, Dean's 4, 11963; dam, Gibson's 329, 13922.

Three Ewes, under 1 year. Four entries.

1st.—J. H. Patrick. 2nd.—L. Parkinson. 3rd.—L. Parkinson.

Wether, 1 year and under 2. Six entries.

1st.—J. T. Gibson. Gibson's 375, 15407, 1906. Sire, Pears 361, 10905; dam, Gibson's 122, 9996.
2nd.—J. H. Patrick. Patrick's No. 4, Spring, 1907. Sire, Fleshy Boy, 12127; dam, Charlton's 78, 9863.
3rd.—L. Parkinson. Parkinson's 490, 14920, Spring 1906. Sire, Charlton's 67, 9852; dam, L. P.'s 208, 9011.
4th.—L. Parkinson. Parkinson's 491, 14921, Spring 1906. Sire, Charlton's 67, 9852; dam, Parkinson's 200, 8250.
5th.—L. Parkinson. Parkinson's 492, 14919, Spring 1906. Sire, Charlton's 67, 9852; dam, L. P.'s 210, 9013.

Wether, under 1 year. Six entries.

1st.—L. Parkinson Parkinson's 738, 17447, Spring 1907. Sire, Byran 9474; dam, Parkinson's 469, 13683.
2nd.—L. Parkinson. Parkinson's 736, 17449, Spring 1907. Sire, Byran 9474; dam, Parkinson's 471, 13685.
3rd.—L. Parkinson. Parkinson's 737, 17448, Spring 1907. Sire, Byran 9474; dam, Parkinson's 466, 13680.
4th.—J. T. Gibson. Gibson's 428, 17549, 1907. Sire, Pears 361, 10905; dam, Trix 13753.
5th.—J. T. Gibson. Gibson's 429, 17550, 1907. Sire, Pears 361, 10905; dam, Lady 10, 13817.

Three Wethers under 1 year. Three entries.

1st.—L. Parkinson 2nd.—L. Parkinson. 3rd.—J T. Gibson.

Best Wether under 2 years.

1st.—J T. Gibson.

LINCOLN DRESSED CARCASSES.

Wether, 1 year and under 2. Four entries.

1st.— L. Parkinson.
2nd.—L. Parkinson.
3rd.—J. H. Patrick.
4th.—J. T. Gibson.

Wether, under 1 year. Three entries.

1st.—L. Parkinson 2nd.—L. Parkinson. 3rd.—J T. Gibson

LEICESTERS.

Ewe, under 1 year. Fourteen entries.

1st.—A. & W. Whitelaw, Guelph. Maggie W. 10523. March. 1907. Sire. Achilles 10086: dam. Daisy of Guelph 6th. 6017.
2nd.—Oliver Turnbull. Walton. Lady Walton 10673. March. 1907. Sire. Earl of Rosedale 7463; dam, Beach Nelly 5420.
3rd.—John Kelly, Shakespeare. Florence Cross 11051, April. 1907. Sire. Fernwood Stamp 8045: dam, Bertha May 9266.
4th.—John Barber. Salem. Salem Hester 11292, March 10th, 1907. Sire, Willie Wonder 7233; dam. Salem Lady 7010.
5th.—John Kelly, Kelly's 700. 11276, March 1907. Sire, Kelly's Choice 9708: dam. K-'s Pride 4905.

Three Ewes, under 1 year Seven entries.

1st.—A. & W. Whitelaw.
2nd.—Oliver Turnbull.
3rd.—John Kelly.
4th.—John Barber.
5th.—Hastings Bros., Crosshill.

Wether, 1 year and under 2. Six entries.

1st.—John Kelly. Tom, March. Sire, Dan Patch 7577; dam, K.'s Pride 4905.
2nd.—A. & W. Whitelaw. Cracker Jack, April, 1906. Sire, Billy Remus 9566; dam, Jenny Berry 2754.
3rd.—Hastings Bros. Burchell 9934, April, 1906. Sire, Sam 7924; dam, K.'s Lady 4906.
4th.—G. & W. Parkinson. Dunk, March, 1906. Sire, Jerry No. 4, 7605; dam, Muriel Boyd 8th, 5302.
5th.—Oliver Turnbull. Roy W., April, 1906. Sire, Prince of Cloverdale 9203; dam, Gracie 4th 9208.

Wether, under 1 year. Twelve entries.

1st.—Oliver Turnbull. First Sight, March, 1907. Sire, Wilford W. 9380; dam, Turnbull's No. 2, 6467.
2nd.—G. & W. Parkinson. Long Lugs No. 1, March, 1907. Sire, Douglas Royal Banner 6917; dam, Valeria Boyd 5th, 5294.
3rd.—A. & W. Whitelaw. Peter W., March, 1907. Sire, Ulysses 10085; dam, Jenny Berry 2754.
4th.—Hastings Bros. Belmont Laddie 11287, April, 1907. Sire, Sam 7924; dam, Pauline 6628.
5th.—Oliver Turnbull. 2nd W., March, 1907. Sire, General Taylor 9823; dam, Beach Marion 8833.

Three Wethers, under 1 year. Five entries.

1st.—Oliver Turnbull.
2nd.—Hastings Bros.
3rd.—A. & W. Whitelaw.
4th.—G. & W. Parkinson.

Best Wether under 2 years.

1st.—John Kelly.

LEICESTER DRESSED CARCASSES.

Wether, 1 year and under 2. Four entries.

1st.—G. & W. Parkinson.
2nd.—Hastings Bros.
3rd.—Oliver Turnbull.
4th.—A. & W. Whitelaw.

Wether, under 1 year. Five entries

1st.—Hastings Bros.
2nd.—A. & W. Whitelaw.
3rd.—G. & W. Parkinson.
4th.—Oliver Turnbull.
5th.—Oliver Turnbull.

OXFORDS.

Ewe, under 1 year. Twenty-one entries.

1st.— J. W. Lee & Sons, Simcoe. Lee's Ewe 138, 42273, March, 1907.
2nd.—A. Stevenson, Atwood. Stevenson 79, 43228, March, 1907. Sire, Stewart 75, 41495; dam, Stevenson's 56, 35956.
3rd.—Robert J. Hine, Dutton. Hine's Lal 489, 43238, April, 1907. Sire, Hanitonian 25, (36105); dam, Linden Lal 7, 21601.
4th.—J. W. Lee & Sons. Lee's Ewe 141, 42276, March, 1907.
5th.—Alex. Stewart, Living Springs. Stewart's 86, 43337, April, 1907. Sire, Stewart's Togo 33688; dam, Stewart's 18, 28864.

Three Ewes, under 1 year. Seven entries.

1st.—J. W. Lee & Sons.
2nd.—Alex. Stewart.
3rd.—Robert J. Hine.
4th— A Stevenson.
5th.—J. A. Cerswell, Bond Head

Wether, 1 year and under 2. Two entries.

1st.—W. E. Wright, Glanworth. Wright's 592, 39218, 1906.
2nd.—A. Stevenson. Stevenson 62, 39161, March, 1906. Sire, Springbank Jupiter 16731; dam, Cousins 160, 25613.

Wether, under 1 year. Twelve entries.

1st.—J. A. Cerswell. Cerswell's 81, 43318, April, 1907. Sire, Sunset 38348; dam Cerswell's 56, 39752.
2nd.—J. W. Lee & Sons. Helbon King 139, 42276, March, 1907.
3rd.—J. A. Cerswell. Cerswell's 75, 43319, April, 1907. Sire, Sunset 38348; dam, Arkell's 1965, 37976.
4th.—W. E. Wright. Wright's 627, 43323, 1907. Sire, Mapleton King 300, 36838; dam, St. Annes 170, 27705.
5th.—W. E. Wright. Wright's 628, 43333, 1907. Sire, Barbour's 55, 39173; dam, Wright's 522, 35709.

Three Wethers, under 1 year. Four entries.

1st.—J. A. Cerswell. 2nd.—W. E. Wright. 3rd.— A. Stevenson.

Best Wether, under 2 years.

1st.—J. A. Cerswell.

OXFORD-DOWN DRESSED CARCASSES.

Wether, 1 year and under 2. Two entries.

1st.—A. Stevenson. 2nd.—W. E. Wright.

Wether, under 1 year. Six entries.

1st.—W. E Wright.
2nd.—W. E. Wright.
3rd.—J. A. Cerswell.
4th.—A. Stevenson.
5th.—A. Stevenson.

SHROPSHIRES.

Ewe, under 1 year. Seven entries.

1st.—J. & D. J. Campbell, Woodville. Campbell's 1539, 256296, Spring 1907.
2nd.—J. & D. J. Campbell. Campbell's 1559, 260201. Spring 1907
3rd.—J. & D. J. Campbell. Campbell's 1542, 256298, Spring 1907.
4th.—Abram Rudell, Hespeler. Rudell's 425, 262599, Spring 1907. Sire, Arthur's 69 237921; dam, Rudell's 328, 233336.
5th.—J. & D. J. Campbell. Campbell's 1541, 256297, Spring, 1907.

Three Ewes, under 1 year. Two entries.

1st.—J. & D. J. Campbell. 2nd.—Abram Rudell.

Wether, 1 year and under 2. Seven entries.

1st.—W. E. Wright. Wright's 582, 239182, 1906.
2nd.—J. & D. J. Campbell. Adament 236893, Spring 1906.
3rd.—J. & D. J. Campbell. Fair Star 309 236912, Spring 1906.
4th.—J. & D. J. Campbell. McKague's 67, 236902, Spring 1906
5th.—W. E. Wright. Wright 583, 239183, 1906.

Wether, under 1 year Six entries.

1st.—J. & D. J. Campbell. Campbell's 1573, 260200, Spring 1907.
2nd.—J. & D. J. Campbell. Campbell's 1602, 256832, Spring 1907.
3rd.—W. E. Wright. Wright 631, 1907. Sire, The Gentleman 110866; dam, Wright's 403, 175703.
4th.—J. & D. J. Campbell. Campbell's 1563, 260199, Spring 1907.
5th.—Abram Rudell. Rudell 424, 262602, Spring 1907. Sire, Arthur 69, 237921; dam, Watson 28, 225661.

Three Wethers, under 1 year. Three entries.

1st.—J. & D. J. Campbell. 2nd.—W. E. Wright, 3rd. Abram Rudell.

Best Wether, under 2 years.

1st.—W. E. Wright.

SHROPSHIRE DRESSED CARCASSES.

Wether, 1 year and under 2. Four entries.

1st.—W. E. Wright.
2nd.—Lloyd-Jones, Bros., Burford.
3rd.—Abram Rudell.
4th.—W. E. Wright.

Wether, under 1 year. Four entries.

1st—J. & D. J. Campbell.
2nd.—Abram Rudell.
3rd.—Abram Rudell.
4th.—W. E. Wright.

SOUTHDOWNS.

Ewe, under 1 year. Eight entries.

1st.—Robert McEwen, Byron. 21175, February, 1907. Sire, Babraham Hodge 17471; dam, Bathurst Ewe 213-05 20865.
2nd.—Telfer Bros., Paris. Telfer Ewe 180, 22150, 1907. Sire, Oakley 21108; dam, Bab Ruby 19841.
3rd.—Geo. Baker, Simcoe. Baker Ewe 172, 22314, April 12, 1907. Sire, St. Alban's King 18489; dam Baker Ewe 110, 17338.
4th.—Robert McEwen. 22177, February, 1907. Sire, Babraham Hodge 17471; dam, Bathurst Ewe 213-04, 21038.
5th.—Geo. Baker. Baker Ewe 173, 22315, April 6th, 1907. Sire, St. Alban's King 18489; dam, Baker Ewe 137, 20296.

Three Ewes, under 1 year. Three entries.

1st.—Geo. Baker. 2nd.—Robert McEwen. 3rd.—Telfer Bros.

Wether, 1 year and under 2. Seven entries.

1st.—Sir Geo. Drummond, Beaconsfield, Que. (————) 1105, 21069, 1906.
2nd.—Sir Geo. Drummond. (————) 1126, 21070, 1906.
3rd.—Sir Geo. Drummond. (————) 1127, 21071, 1906.
4th.—Robert McEwen. 22348, March, 1906. Sire, Babraham Glory 19655; dam, McEwen Ewe 86, 16050.
5th.—John Jackson, Abingdon. Jackson's 26, 1906. Sire, Drummond's 1020, 19693; dam, Jackson's Ewe 84e, 19086.

Wether, under 1 year. Sixteen entries.

1st.—Telfer Bros. Telfer Wether 22, 1907. Sire, Drummond 529, 15469; dam, Drummond 851, 17696.
2nd.—Telfer Bros. Telfer Wether 23, 1907. Sire, Drummond 529, 15469; dam, Drummond 836, 17695.
3rd.—Telfer Bros. Telfer Wether 26, 1907. Sire, Oakley 1, 21108; dam, Bathurst Ewe 21114.
4th.—Sir Geo. Drummond. Drummond's Wether 1196, 22365; February, 1907.
5th.—Sir Geo. Drummond. Drummond's Wether 193, 22364, 1907.

Three Wethers, under 1 year. Five entries.

1st.—Telfer Bros.
2nd.—Sir Geo. Drummond.
3rd.—Sir Geo. Drummond.
4th.—J. W. Lee & Sons.
5th.—John Jackson & Son.

Best Wether, under 2 years.

1st.—Sir Geo. Drummond.

SOUTHDOWN DRESSED CARCASSES.

Wether, 1 year and under 2. Three entries.

1st.—John Jackson & Son. 2nd.—Robert McEwen.

Wether, under 1 year. Six entries.

1st.—Telfer Bros.
2nd.—J. W. Lee & Sons.
3rd.—J. W. Lee & Sons.
4th.—J. W. Lee & Sons.
5th.—John Jackson & Son.

Dorset Horns.

Ewe, under 1 year. Five entries.

1st.—R. H. Harding, Thorndale. Harding 63, 6667, February, 1907. Sire, Hambro's Best 3836; dam, McGillivray's 4743.
2nd.—Jas. Robertson & Sons, Milton. Holmstead's 6th, 6764, April. Sire, Dunn-na-Glass 3769; dam, Swell Lass 6756.
3rd.—R. H. Harding. Harding 57, 6661, January, 1907. Sire, Tranquillity 1365, 4530; dam, Lily 1686.
4th.—Jas. Robertson & Sons. Riverview 81, 6685, March, 1907. Sire, Delcombe 6675 (imp); dam, Harding 164, 2255.
5th.—R. H. Harding. Harding 58, 6662, January, 1907. Sire, Tranquillity 1365, 4530; dam, Annie Laurie 3457.

Wether, 1 year and under 2. Four entries.

1st.—R. H. Harding. Harding 40, 5454, April, 1906. Sire, Tranquillity 1365, 4530; dam, Annie Laurie 3451.
2nd.—R. H. Harding. Johnnie 5481, May, 1906. Sire, Bartlett's Best 9204; dam, McLee's 46, 2925.
3rd.—Hastings Bros., Crosshill. Reuben 31, May, 1906. Sire, Homestead H 23; dam, Homestead May 25.
4th.—James Robertson & Sons. Wattie 6731, April, 1906. Sire, Jake 3363; dam, Hunter 42, 3367.

Wether, under 1 year. Six entries.

1st.—Jas. Robertson & Sons. Riverview 82, April, 1907. Sire, Delcombe 6675 (imp); dam, Bartlett 56, 4977.
2nd.—Jas. Robertson & Sons. Homestead 9, 6996, April, 1907. Sire, Dunn-na-Glass 3769; dam, Homestead 5, 7003.
3rd.—R. H. Harding. Harding 69, 6673, February, 1907. Sire, Tranquillity 4530; dam, My Honey 5636.
4th.—R. H. Harding. Harding 70, 6674, March, 1907. Sire, Hambro's Best 3836; dam, Charlotte 2nd, 3852.
5th.—Jas. Robertson & Sons. Riverview 83, May, 1907. Sire, Delcombe 6675 (imp); dam, McLee's 48, 2925.

Three Wethers, under 1 year. Three entries.

1st.—Jas. Robertson & Sons. 2nd.—R. H. Harding. 3rd.—R. H. Harding.

Best Wether, under 2 years.

1st.—R. H. Harding.

Dorset Horn Dressed Carcasses.

Wether, 1 year and under 2. Four entries.

1st.—Hastings Bros.
2nd.—R. H. Harding.
3rd.—R. H. Harding.
4th.—Jas. Robertson & Sons.

Wether, under 1 year. Five entries.

1st.—Jas. Robertson & Sons.
2nd.—Jas. Robertson & Sons.
3rd.—R. H. Harding.
4th.—R. H. Harding.
5th.—R. H. Harding.

Hampshires and Suffolks.

Ewe, under 1 year. Five entries.

1st.—John Kelly, Shakespeare. Kelly's 39, 14927, March, 1907. Sire, (————) 4352; dam, (————) 7218.
2nd.—James Bowman, Guelph. No. 142, 1184, March, 1907. Sire, (————) 837; dam, (————) 869.
3rd.—John Kelly. Kelly's 41, 14925, March, 1907. Sire, (————) 4352; dam, (————) 10611.
4th.—John Kelly. Kelly's 43, 14928, March, 1907. Sire, (————) 4352; dam, (————) 6425.

Wether, 1 year and under 2 Three entries.

1st.—James Bowman. May, 1906. Sire, 721; dam, 676.
2nd.—Telfer Bros., Paris. Buster Brown 6136, 1906. Sire, Warrior 2nd 4430; dam, Telfer Ewe 15, 10683.
3rd.—Telfer Bros. Lize 6137, 1906. Sire, Warrior 2nd 4430; dam, Milton Ewe 829, 9506.

Wether, under 1 year. One entry.

1st.—James Bowman.

Three Wethers, under 1 year. One entry.

1st.—James Bowman.

Best Wether, under 2 years.

1st.—James Bowman.

Hampshire and Suffolk Dressed Carcasses.

Wether, 1 year and under 2. Three entries.

1st.—Telfer Bros. 2nd.—James Bowman. 3rd.—Telfer Bros.

Wether, under 1 year. One entry.

1st.—James Bowman.

Grades or Crosses. Sired by a Ram of a Long-Wooled Breed.

Wether, 1 year and under 2. Seven entries.

1st.—J. H. Patrick, Ilderton. Patrick's No. 5, Spring 1906. Sire, Clarkson 11697.
2nd.—E. Brien & Son, Ridgetown. Bobs. Sire, Barrett's 11, 36674.
3rd.—J. T. Gibson, Denfield. (————), 1906. Sire, Pears 361, 10905.
4th.—L. Parkinson, Eramosa. (————), Spring 1906. Sire, Mitchell's 150, 13435.
5th.—J. T. Gibson. (————), 1906. Sire, Pears 361, 10905.

Wether, under 1 year. Twelve entries.

1st.—E. Brien & Son. Baby (Cotswold Grade). Sire, Barrett's 11, 36674.
2nd.—Rawlings & Bailey, Forest (Cotswold Leicester Cross), Spring 1907. Sire, Rawlings 910, 35181.
3rd.—L. Parkinson. (————), Spring 1907. Sire, White's 26, 13686.
4th.—E. Brien & Son. Beau (Cotswold Grade). Sire, Barrett's 11, 36674.
5th.—Hastings Bros., Crosshill. Billy Boy.

Three Wethers, under 1 year. Four entries.

1st.—E. Brien & Son. 2nd.—Rawlings & Bailey. 3rd.—L. Parkinson.

Best Wether under 2 years.

1st.—J. H. Patrick.

Grades or Crosses, Sired by a Ram of a Short-wooled Breed.

Wether, 1 year and under 2. Eight entries.

1st.—J. & D. J. Campbell, Woodville. No. 1, Spring 1906. (Shropshire) Sire, Minto 201836.
2nd.—John Kelly, Shakespeare. Big Sandy, April. Sire, 4957.
3rd.—J. & D. J. Campbell. No. 2, Spring 1906. (Shropshire) sire, Minto 204836
4th.—J. & D. J. Campbell. No. 3, Spring 1906. (Shropshire) sire, Minto 201836.
5th.—Lloyd-Jones, Bros., Burford. (————) Sire, Bowman's 84, 219273

Wether, under 1 year. Twelve entries.

1st.—J. & D. J. Campbell. No. 4, Spring 1907. (Shropshire) sire, Windott 260197.
2nd.—J. & D. J. Campbell. No. 5, Spring 1907. (Shropshire) sire, Windott 260197
3rd.—John Kelly. Rob, April, 1907. Sire, (————) 4957.
4th.—Abram Rudell, Hespeler. Thomas, Spring 1907. Sire, Rudell 363, 250058.
5th.—W. E. Wright, Glanworth. (————) Spring 1907. Sire, McPherson's 70, 225511.

Three Wethers, under 1 year. Five entries.

1st and 2nd.—J. & D. J. Campbell 3rd.—Abram Rudell.

Best Wether, under 2 years.

1st.—J. & D. J. Campbell.

LONG-WOOLED GRADE OR CROSS, DRESSED CARCASSES.

Wether, 1 year and under 2. Four entries.

1st.—E. Brien & Son. 2nd.—J. T. Gibson. 3rd.— L. Parkinson.

Wether, under 1 year. Nine entries.

1st.—A. & W. Whitelaw, Guelph.
2nd.—L. Parkinson.
3rd.—Rawlings & Bailey.
4th.—L. Parkinson.
5th.—E. Brien & Son.

SHORT-WOOLED GRADE OR CROSS, DRESSED CARCASSES.

Wether, 1 year and under 2. Four entries.

1st.—Abram Rudell. 2nd.—Lloyd-Jones Bros. 3rd.—W. E. Wright.

Wether, under 1 year. Nine entries.

1st.—J. & D. J. Campbell.
2nd.—W. E. Wright.
3rd.—Abram Rudell.
4th.—John Kelly.
5th.—Abram Rudell.

FAT SHEEP, BRED AND OWNED BY RESIDENT OF WELLINGTON COUNTY. SPECIAL.

1st.—A. & W. Whitelaw. 2nd.—L. Parkinson. 3rd.—L. Parkinson.

PEN OF THREE LEICESTER EWE LAMBS. SPECIAL.

1st.—John Barber, Salem. 2nd.—John S. Cowan, Donegal.

PEN OF FIVE LAMBS, ANY BREED, GRADE OR CROSS. SPECIAL.

1st.—John Campbell, Woodville.

OXFORD-DOWN SPECIAL PRIZES.

Yearling Wether.

1st.—W. E. Wright. 2nd.—A. Stevenson, Atwood.

Lamb Wether.

1st.—J. A. Cerswell. 2nd.—J. W. Lee & Sons. 3rd.—J. A. Cerswell.

Pen of Three Wether Lambs.

1st.—J. A. Cerswell. 2nd.—W. E. Wright. 3rd.—A. Stevenson.

SHROPSHIRE SPECIAL PRIZES.

Pure-bred Wether, 1 year and under 2.

1st.—W. E. Wright. 2nd and 3rd.—J. & D. J. Campbell.

Pure-bred Wether, under 1 year.

1st and 2nd.—J. & D J. Campbell. 3rd.— W. E. Wright.

Pen of Three Pure-bred Wethers, under 1 year.

1st.— J. & D. J. Campbell. 2nd.—W. E. Wright. 3rd.—A. Rudell.

Grade Wether, 1 year and under 2, sired by registered Shropshire ram.

1st, 2nd and 3rd.—J. & D. J. Campbell.

Grade Wether, under 1 year, sired by registered Shropshire ram.

1st and 2nd.—J. & D. J. Campbell. 3rd.—A. Rudell.

SOUTHDOWN SPECIAL PRIZES.

Ewe, under 1 year.

1st.—R. McEwen. 2nd.—Telfer Bros. 3rd.—Geo. Baker.

Pen of Three Ewes, under 1 year

1st.—Geo. Baker. 2nd.—R. McEwen. 3rd.—Telfer Bros.

Pen of Three Ewe Lambs, under 1 year, get of one ram and bred by exhibitor.

1st.—Geo. Baker. 2nd.—R. McEwen. 3rd.—Telfer Bros.

Wether, 1 year and under 2.

1st, 2nd and 3rd.—Sir Geo. Drummond, Beaconsfield, Que.

Wether, under 1 year.

1st, 2nd and 3rd.—Telfer Bros., Paris.

Pen of Three Wethers, under 1 year.

1st.—Telfer Bros. 2nd and 3rd.—Sir Geo. Drummond.

DORSET-HORN SPECIAL PRIZES.

Wether, 1 year and under 2.

1st and 2nd.—R. H. Harding, Thorndale.

Wether, under 1 year.

1st and 2nd.—J. Robertson & Sons, Milton.

Ewe, under 1 year.

1st.—R. H. Harding. 2nd.—J. Robertson & Sons.

Best Wether, any age.

1st.—R. H. Harding, Thorndale.

BEST PEN OF FIVE LAMBS, ANY BREED, GRADE OR CROSS.

1st.—J. & D. J. Campbell, Woodville

SWINE.

YORKSHIRES.

Barrow, 6 months and under 9. Five entries.

1st.—R. F. Duck & Son, Port Credit. Jim, March 12, 1907 Sire, Oak Lodge Metchley 2nd, 13125; dam, Lake View Queen 3rd, 15192.

2nd.—R. F. Duck & Son. Jack, March 12, 1907. Sire, Oak Lodge Metchley 2nd, 13125; dam, Lake View Queen 3rd, 15192.

3rd.—Jos. Featherston, Streetsville. Rufford, March 1, 1907. Sire, Bushy Farm Hero 11457; dam, Pine Grove Rufford Belle 2nd, 11858.

4th.—R. F. Duck & Son. Sandy, March 12, 1907. Sire, Oak Lodge Metchley 2nd, 13125; dam, Lake View Queen 3rd, 15192.

5th.—Jos. Featherston. Rufford 2nd, April 10, 1907. Sire, Pine Grove Prince 13th, 23360; dam, Pine Grove Rufford Belle 10th, 21378.

Barrow, under 6 months. Seven entries.

1st.—Jos. Featherston & Son. Pine Grove Rufford, June 12. Sire, Pine Grove Prince 13th, 23360; dam, Pine Grove Rufford Belle 9th, 21377.

2nd.—Jas. Wilson & Sons, Fergus. (————). June 3rd, 1907. Sire, Holywell Cardiff 6th, 9230; dam, Broomhouse Hawthorn 1st, 21144.

3rd.—R. F. Duck & Son. King, June 11, 1907. Sire, Summer Hill Dalmeny Corner Stone (imp) 14773; dam, Lake View Jennie 3rd, 17706.

4th.—J. E. Brethour, Burford. (————), June 4, 1907. Sire, Oak Lodge Manifesto 23272; dam, Oak Lodge Cinderella 208, 22485.

5th.—R. F. Duck & Son. Duke, June 11, 1907. Sire, Summer Hill Dalmeny Corner Stone (imp) 14773; dam, Lake View Jennie 3rd, 17706.

6th.—H. S. McDiarmid, Fingal. Maple Grove Samuel, June 16, 1907. Sire, S. H. Topsman 14th, 19521; dam, S. H. Dalmeny Duchess 60th (imp) 16761.

Sow, 9 months and under 15. Six entries.

1st.—Jos. Featherston & Son. Pine Grove Dalmeny Mite 21961, September 13, 1906. Sire, Dalmeny Joe (imp) 13577; dam, Pine Grove Missabella 13756.

2nd.—R. F. Duck & Son. Lake View Princess Louise 24669, October 16, 1906. Sire, Oak Lodge Metchley 20th, 13125; dam, Lake View Queen 3rd, 15912.

3rd.—Jos. Featherston & Son. Pine Grove Nell 23351, October 25, 1906. Sire, Dalmeny Joe (imp) 13577; dam, Summerhill Nell 4th, 17344.

4th.—Jas. Wilson & Sons. Monkland Betty 12th, 23679; September 2nd, 1906. Sire, Holywell Cardiff 6th, 9230; dam, Oak Lodge Minnie 26th, 9278.

5th.—Jas. Wilson & Sons. Monkland Betty 13th, 23680, September 2, 1906. Sire, Holywell Cardiff 6th, 9230; dam, Oak Lodge Minnie 26th, 9278.

6th.—Jas. Wilson & Sons. Monkland Betty 14th, 24719, September 2, 1906. Sire, Holywell Cardiff 6th, 9230; dam, Oak Lodge Minnie 26th, 9278.

Sow, 6 months and under 9. Six entries.

1st.—Jos. Featherston. Pine Grove Lendella 13th, 24731, March 23, 1907. Sire, Elmwood Ned 21966; dam, Pine Grove Lendella 10th, 15955.

2nd.—Jos. Featherston. Pine Grove Lendella 14th, 24732, March 23, 1907. Sire, Elmwood Ned 21966; dam, Pine Grove Lendella 10th, 15955.

3rd.—R. F. Duck & Son. Lakeview Lorette 2nd, 24668, March 12, 1907. Sire, Oak Lodge Metchley 20, 13125; dam, Lakeview Queen 3rd, 15912.

4th.—Jas. Wilson & Sons. Monkland Aggie 23675, March 3, 1907. Sire, Broomhouse Mediate, (imp) 20328; dam, Monkland Maggie, 15946.

5th.—Jas. Wilson & Sons. Monkland Peggie 8th, 23685, March 2, 1907. Sire, Canadian Duke, 14705; dam, Monkland Maggie 4th, 15949.

6th.—Jas. Wilson & Sons. Monkland Peggie 9th, 23686, March 2, 1907 Sire, Canadian Duke, 14705; dam, Monkland Maggie 4th, 15949.

Sow, under 6 months. Twelve entries.

1st.—Jas. Wilson & Sons. Monkland Holywell Lass, 24720, June 3, 1907. Sire, Holywell Cardiff 6th, 9230; dam, Broomhouse Hawthorn 1st, 21144.

2nd.—J. E. Brethour. Oak Lodge Cinderella 236, June 3rd, 1906. Sire, Oak Lodge Quaker 18604; dam, Oak Lodge Cinderella 143, 13672.

3rd.—R. F. Duck & Son. Lakeview Laura 24670, June 11, 1907.

4th.—Jos. Featherston & Sons. Pine Grove Rufford Belle 27, 24734, June 12, 1907. Sire, Pine Grove Prince 13th, 23360; dam, Pine Grove Rufford Belle 9th, 21377.

5th.—J. E. Brethour. Oak Lodge Cinderella 237, June 3rd, 1906. Sire, Oak Lodge Quaker 18604; dam, Oak Lodge Cinderella 143, 13672.

Three pigs, the offspring of one sow, bred by exhibitor. Five entries.

1st.—Jos. Featherston & Son. 2nd.—J. E. Brethour. 3rd.—Jas. Wilson & Son.

Berkshires.

Barrow, 6 months and under 9. Six entries.

1st.—John Kelly, Shakespeare. Tom, March 5, 1907. Sire, Woodstock Laddie, 16329; dam, Shakespeare Queen 13170.

2nd.—John Kelly. Jim, March 5, 1907. Sire, Woodstock Laddie 16329; dam, Shakespeare Queen 13170.

3rd.—E. Brien & Son, Ridgetown. Borden, March 2, 1907. Sire, Perfection (imp) 9801; dam, Bonnie Maid 13702.

4th.—John S. Cowan, Donegal. Fairview Dan, March 18. Sire, Ardtrea Masterpiece 15803; dam, Fairview Prime Rose 12509.

5th.—H. Koelln & Son, Glenallan, Dexter, March 7, 1907. Sire, York Lodge Tom 16th, 12285; dam, Blue Belle 12, 13956.

Barrow, under 6 months. Eight entries.

1st.—W. H. Durham, Box 1052, Toronto. Bobs, June 2, 1907. Sire, British Sovereign 16657; dam, Durham Compton Flashlight 17994.

2nd.—E. Brien & Son. Beaver, June 20, 1907. Sire, Perfection (imp) 9801; dam, Bonnie Lady 12213.

3rd.—W. H. Durham, Box 1052, Toronto. Bobs 2nd, June 2, 1907. Sire, British Sovereign 11657; dam, Durham Compton Flashlight 17994.

4th.—John Kelly. Bill, June 1, 1907. Sire, Concord Dick 13912; dam, Shakespeare Bell, 13685.

5th.—H. Koelln & Son. Jack, June 3, 1907. Sire, York Lodge Tom 16th, 12285; dam, Castle Flo 2nd, 16373.

Sow, 9 months and under 15. Twelve entries.

1st.—W. H Durham. Doctor's Fly 18344, November 24th, 1906. Sire, Polegate Doctor 14684; dam, Durham Compton Flashlight 17994.

2nd.—E. Brien & Son. Woodburn Sprite 3rd, 18934, October 24th, 1906. Sire, Sunnyside Victor 12470; dam, Bonnie Lady 12213.

3rd.—John S. Cowan. Fairview Daisy 18618, November 29th, 1906. Sire, Ardtrea Masterpiece 15803; dam, Fairview Fashion 14916.
4th.—E. Brien & Son. Woodburn Sprite 2nd, 18935. October 24th, 1906. Sire, Sunnysido Victor 12470; dam, Bonnie Lady 12213.
5th.—H. Koelln & Son. Maud 18847, September 11th, 1906. Sire, Concord Master 14595. dam, River View 1da 17005.
6th.—E. Brien & Son. Woodburn Sprite 18933, October 24th, 1906. Sire, Sunnysido Victor, 12470; dam, Bonnie Lady 12213.

Sow, 6 months and under 9. Ten entries.

1st.—John Kelly. Kelly's 21, 19007, March 5th, 1907. Sire, Woodstock Laddie, 16329; dam, Shakespeare Queen, 13170.
2nd.—W. H. Durham. British Beauty, 19073. April 10th, 1907. Sire, British Sovereign, 16657; dam, Manor Exter Beauty, 17627.
3rd.—John Kelly. Kelly's 22, 19008, March 5th, 1907. Sire, Woodstock Laddie, 16329; dam, Shakespeare Queen, 13170.
4th.—W. H. Durham. British Beauty 2nd, 19074, April 10th, 1907. Sire, British Sovereign, 16657; dam, Manor Exter Beauty, 17627.
5th.—H. Koelln & Son. Maggie, 18846, March 7th, 1907. Sire, York Lodge Tom 16th, 12285; dam, Blue Belle 12th, 13956.
6th.—E. Brien & Son. Woodburn Madge, 18936, March 2nd. 1907. Sire, Perfection (imp) 9801; dam, Bonnie Maid, 13702.

Sow, under 6 months. Fifteen entries.

1st.—John S. Cowan. Fairview Champion, 19032, June 3rd. 1907. Sire, Tom, 17266; dam, Fairview Rose, 13727.
2nd.—John S. Cowan. Fairview Perfection, 19033, June 3rd, 1907. Sire, Tom, 17266; dam, Fairview Rose, 13727.
3rd.—W. H. Durham. British Flashlight, 19075, June 2nd, 1907. Sire, British Sovereign, 16657; dam, Durham Compton Flashlight, 17994.
4th.—John S. Cowan. Fairview Fashion, 19034, June 3rd, 1907. Sire, Tom, 17266; dam, Fairview Rose, 13727.
5th.—E. Brien & Son. Woodburn Ruby, 18931, June 20th, 1907. Sire, Perfection (imp) 9801; dam, Bonnie Lady, 12213.
6th.—Joshua Lawrence, Oxford Centre. Mabel, 18943, June 15th, 1907. Sire, British Duke, 18376; dam, Snellgrove Mabel, 14903.

Three Pigs, the offspring of one sow, bred by Exhibitor.

1st.—John Kelly.
2nd.—John S. Cowan.
3rd.—E. Brien & Son.
4th.—W. H. Durham.
5th.—Joshua Lawrence.

TAMWORTHS.

Barrow, 6 months and under 9. Five entries.

1st.—D. Douglas & Sons, Mitchell. Rufus, April 2nd, 1907. Sire, Maplehurst King, 3904; dam, Sal, 4244.
2nd.—D. Douglas & Sons. Buster Bill, March 20th, 1907. Sire, Troy Boy, 2792; dam, Maplehurst Favorite, 4339.
3rd.—Charles Currie, Morriston. Jack, March 5th, 1907. Sire, Newcastle Choice, 3415; dam, Morriston Betsie, 4455.
4th.—Charles Currie. Joe, March 5th, 1908. Sire, Newcastle Choice, 3415; dam, Morriston Betsie, 4455.
5th.—Charles Currie. Jim, March 5th, 1907. Sire, Newcastle Choice, 3415; dam, Morriston Betsie, 4455.

Barrow, under 6 months. Five entries.

1st.—D. Douglas & Sons. Tom Longboat, June 15th, 1907; Sire, Morriston George, 4806; dam, Maplehurst Mina, 4861.
2nd.—D. Douglas & Sons. Amber Prince, June 15th, 1907. Sire, Morriston George, 4806; dam, Maplehurst Mina, 4861.
3rd.—Charles Currie. Dan, June 7th, 1907. Sire, Newcastle Choice, 3415; dam, Thrifty Pink, 3871.
4th.—Charles Currie. Dick, June 7th, 1907. Sire, Newcastle Choice, 3415; dam, Thrifty Pink, 3871.
5th.—Charles Currie. Duke, June 7th, 1907. Sire, Newcastle Choice, 3415; dam, Thrifty Pink, 3871.

Sow, 9 months and under 15. Seven entries.

1st.—D. Douglas & Sons. Alma, 5425, September 10th. Sire, Maplehurst King, 3904; dam, Sal 4244

2nd.—D. Douglas & Sons. Olga, 5426, September 10th. Sire, Maplehurst King 3904; dam, Sal, 4244.
3rd.—Chas. Currie. Morriston Lady 5201, September 3rd. Sire, Newcastle Choice 3145; dam, Morriston's Bessie, 4452.
4th.—Chas. Currie. Morriston Lily 5195, September 3rd. Sire, Newcastle Choice 3145; dam, Morriston's Bessie, 4452.
5th.—D. Douglas & Sons. Maplehurst Sally 5427, September 10th. Sire, Maplehurst King 3904; dam, Sal 4244.
6th.—Chas. Currie. Morriston Lassie 5196, September 3rd. Sire, Newcastle Choice 3145; dam, Morriston's Bessie, 4452.

Sow, 6 months and under 9. Six entries.

1st.—Chas. Currie. Morriston Theresa 5197, March 5th, 1907. Sire, Newcastle Choice 3415. dam, Morriston Bessie 4452.
2nd.—D. Douglas & Sons. Ruth 2nd, 5428, March 20th, 1907. Sire, Troy Boy 2792; dam, Maplehurst Favorite 4339.
3rd.—D. Douglas & Sons. Ruth 3rd 5429, March 20th. Sire, Tory Boy 2792; dam, Maplehurst Favorite 4339.
4th.—D. Douglas & Sons. Ruth 4th 5430, March 20th, 1907. Sire, Troy Boy 2792; dam, Maplehurst Favorite, 4339.
5th.—Chas. Currie. Morriston Lena 5198, March 5th, 1907. Sire, Newcastle Choice 3415; dam, Morriston Bessie 4452.
6th.—Chas. Currie. Morriston Peggy 5199, March 5th, 1907. Sire, Newcastle Choice 3415; dam, Morriston Bessie, 4452.

Sow, under 6 months. Six entries.

1st.—D. Douglas & Sons. Maplehurst Lucy 5397, June 15th. Sire, Morriston George 4806; dam, Maplehurst Mina 4861.
2nd.—D. Douglas & Sons. Lady Elgin 5398, June 15th. Sire, Morriston George 4806; dam, Maplehurst Mina 4861.
3rd.—D. Douglas & Sons. Caroline 5399, June 15th. Sire, Morriston George 4806; dam, Maplehurst Mina 4861.
4th.—Chas. Currie. Morriston Flo 5417, June 7th. Sire, Newcastle Choice 3415; dam, Thrifty Pink 3871.
5th.—Chas. Currie. Morriston Fly 5418, June 7th. Sire, Newcastle Choice 3415; dam, Thrifty Pink 3871.
6th.—Chas. Currie. Morriston Flip 5419, June 7th. Sire, Newcastle Choice 3415; dam, Thrifty Pink 3871.

Three pigs, the offspring of one Sow, bred by Exhibitor. Four entries.

1st.—D. Douglas & Sons. 2nd.—Chas. Currie. 3rd.—D. Douglas & Sons.

CHESTER WHITES.

Barrow, 6 months and under 9. Five entries.

1st.—Daniel DeCourcey, Bornholm. Alex, March, 1907. Sire, Burnside Standard 3204; dam, Tessie 3270
2nd.—Daniel DeCourcey. Sandy, March, 1907. Sire, Burnside Standard 3204. dam, Tessie 3270.
3rd.—W. E. Wright, Glanworth. Joe, 1907. Sire, Cedar Grove, 2713; dam, Sally 3053.
4th.—Geo. Bennett, Charing Cross, No. 1, May 1st. Sire, Wanderer, 3552; dam, Muriel 4164.
5th.—Geo. Bennett. No. 2, May 1st. Sire, Wanderer 3552; dam, Muriel 4164.

Barrow, under 6 months. Six entries.

1st.—Daniel DeCourcey. Ned, June, 1907. Sire, Burnside Standard 3204; dam, Teenie 3369.
2nd.—W. E. Wright. Jim, June, 1907. Sire, Peter 4111; dam, Snowdrop 2nd, 3461.
3rd.—Geo. Bennett. No. 3, July 4th, 1907. Sire, Wanderer 3552; dam, Rosette 4163.
5th.—Daniel DeCourcey. Fat 4804; June, 1907. Sire, Burnside Standard 3204; 3369.
5th.—W. E. Wright. Jack, June, 1907. Sire, Peter 4111; dam, Snowdrop 2nd. 3461.

Sow, 9 months and under 15. Six entries.

1st.—Geo. Bennett. Nancey 4778, September 2nd, 1906. Sire, Wanderer, 3552; dam Fairy 4166.
2nd.—Daniel DeCourcey. Rosy 4800, September, 1906. Sire, Thorndale Enterprise 2484; dam, Tessie, 3270.
3rd.—Daniel DeCourcey. Nellie 4801, September, 1906. Sire, Thorndale Enterprise 2484; dam, Tessie 3270.
4th.—Geo. Bennett. Maggie 4777, September 2nd, 1906. Sire, Wanderer 3552; dam, Fairy 4166.
5th.—Geo. Bennett. Aldena 4224, September 2nd, 1906. Sire, Wanderer 3552; dam, Fairy 4166.

Sow, 6 months and under 9. Six entries.

1st.—Geo. Bennett. Ray 4774, May 1st, 1906. Sire, Wanderer 3552; dam, Muriel 4164.
2nd.—Daniel DeCourcey. Fatty 4802, March, 1907. Sire, Burnside Standard 3204; Tessie 3270.
3rd.—Geo. Bennett. Polly 4775, May 1st, 1906. Sire, Wanderer 3552; dam, Muriel 4164.
4th.—Geo. Bennett. Dolly 4776, May 1st, 1906. Sire, Wanderer 3552; dam, Muriel 4164.
5th.—W. E. Wright. Lady Minto, 4788, April, 1907. Sire, Cedar Grove King, 2713; dam, Sally 3053.

Sow, under 6 months. Six entries.

1st.—Geo. Bennett. Lou 4779, July 4th, 1907. Sire, Wanderer 3552; dam, Rosette 4163.
2nd.—Geo. Bennett. Let 4780, July 4th, 1907. Sire, Wanderer 3552; dam, Rosette 4163.
3rd.—Geo. Bennett. Betty 4781, July 4th, 1907. Sire, Wanderer 3552; dam, Rosette 4163.
4th.—W. E. Wright. Fanny 4797, 1907. Sire, Peter 4111; dam, Snowdrop 2nd. 3461.
5th.—Daniel DeCourcey. Fat 4804; June, 1907. Sire, Burnside Standard 3204; dam, Teenie 3369.

Three Pigs, the offspring of one Sow, bred by Exhibitor. Six entries.

1st.—Geo. Bennett. 2nd.—Daniel DeCourcey. 3rd.—Geo. Bennett.

ANY OTHER BREED, GRADE OR CROSS.

Barrow, 6 months and under 9. Eight entries.

1st.—Chas. Currie.
2nd.—H. Koelln & Son.
3rd.—E. Brien & Son.
4th.—Jos. Featherston & Son.
5th.—D. Douglas & Son.

Barrow, under 6 months. Eleven entries.

1st.—D. Douglas & Son.
2nd.—Chas. Currie.
3rd.—Jos. Featherston & Son.
4th.—H. Stuart, Burford.
5th.—H. Suart, Burford.
6th.—John S. Cowan.

Sow, 6 months and under 9. Ten entries.

1st.—Jos. Featherston.
2nd.—D. Douglas & Sons.
3rd.—D. Douglas & Sons.
4th.—H. Keolln & Son.
5th.—E. Brien & Son.
6th.—John S. Cowan.

Sow, under 6 months. Thirteen entries.

1st.—H. Stuart.
2nd.—D. Douglas & Sons.
3rd.—Daniel DeCourcey.
4th.—Geo. Bennett.
5th.—R. Houston, Dixie.
6th.—Jos. Featherston & Son.

EXPORT BACON HOGS.

Two Pure-breds. Twenty-seven entries.

1st.—J. E. Brethour, Burford.
2nd.—R. F. Duck & Son.
3rd.—H. S. McDiarmid, Fingal.
4th.—J. E. Brethour.
5th.—H. S. McDiarmid.
6th.—J. E. Brethour.
7th.—Jos. Featherston & Son.
8th.—Jas. Wilson & Sons, Fergus.
9th.—H. S. McDiarmid.
10th.—Jas. Wilson & Sons.
11th.—Jos. Featherston & Son.

Two Grades or Crosses. Twenty-three entries.

1st.—Jos. Featherston & Son.
2nd.—H. Suart.
3rd.—H. Stuart.
4th.—Chas. Currie.
5th.—Jos. Featherston & Son.
6th.—D. Douglas & Son.
7th.—Chas. Currie.

Two Best Export Bacon Hogs, any breed.

1st.—J. E. Brethour, Burford.

DRESSED CARCASSES OF BACON HOGS.

Two Pure-breds. Twenty-three entries.

1st.—J. E. Brethour.
2nd.—Jos. Featherston & Son.
3rd.—J. E. Brethour.
4th.—R. F. Duck & Son.
5th.—J. E. Brethour.
6th.—Geo. Bennett.
7th.—H. S. McDiarmid.
8th.—R. F. Duck & Son.
9th.—H. S. McDiarmid.
10th.—Jas. Wilson & Sons.
11th.—R. F. Duck & Son.

Two Grades or Crosses. Twenty entries.

1st.—H. Stuart.
2nd.—H. Stuart.
3rd.—R. F. Duck & Son.
4th.—Chas. Currie.
5th.—Chas. Currie.
6th.—Jos. Featherston & Son.
7th.—R. Houston, Dixie.

Two Best Carcasses, any breed.

1st.—J. E. Brethour, Burford.

JUDGING COMPETITION.

BEEF CATTLE. FIFTY-FIVE ENTRIES.

1st.—A. A. Knight, O.A.C.
2nd.—J. D. Tothill, O.A.C.
3rd.—R. J. Allen, O.A.C.
4th.—P. E. French, O.A.C.
5th.—C. A. Whetham, O.A.C.
6th.—C. F. McEwen, Byron.
7th.—N. Foster, O.A.C.
8th.—F. R. Martindale, O.A.C.
9th.—N. M. Ballantyne, O.A.C.
10th.—O. C. White, O.A.C.

DAIRY CATTLE. FORTY-NINE ENTRIES.

1st.—C. G. McKillican, O.A.C.
2nd.—N. D. McKenzie, O.A.C.
3rd.—P. E. Angle, O.A.C.
4th.—A. J. Cowie, O.A.C.
5th.—J. H. King, O.A.C.
6th.—F. H. Rice, O.A.C.
7th.—T. O. Clark, O.A.C.
8th.—S. H. Culp, O.A.C.
9th.—M. S. Middleton, O.A.C.
10th.—J. M. Jewson.

SHEEP. TWENTY-THREE ENTRIES.

1st.—Jas. A. Telfer, Paris.
2nd.—W. A. Barnet, O.A.C.
3rd.—C. F. McEwen, Byron.
4th.—M. S. Middleton, O.A.C.
5th.—D. O. Bell, Glanford Station.
6th.—A. M. Shaw, O.A.C.
7th.—S. Wilson, O.A.C.
8th.—G. H. Cutler, O.A.C.
9th.—C. M. Learmonth, O.A.C.
10th.—D. H. Kelly, Shakespeare.

SWINE. THIRTY-ONE ENTRIES.

1st.—J. F. Metcalf, O.A.C.
2nd.—A. Snyder, O.A.C.
3rd.—J. M. Lewis, O.A.C.
4th.—D. M. Johnson, O.A.C.
5th.—J. M. Jewson.
6th.—W. H. Irvine, O.A.C.
7th.—O. C. White, O.A.C.
8th.—C. L. Robertson, O.A.C.
9th.—S. Wilson, O.A.C.
10th.—P. E. French, O.A.C.

SEEDS.

Fall Wheat, White. Ten entries.

1st.—C. R. Gies, Heidelberg.
2nd.—Andrew Schmidt, Mildmay.
3rd.—Chas. Currie, Morriston.

Fall Wheat, Red or Amber. Eight entries.

1st.—David Taylor, Corwhin.
2nd.—Andrew Harmer, Plattsville.
3rd.—Walter Hartman, Clarksburg.
4th.—Thos. B. Lush, Oustic.

Spring Wheat. Five entries.

1st.—A. R. Wood, Fergus.
2nd.—Thos. B. Lush, Oustic.
3rd.—Walter Hartman, Clarksburg.
4th.—Samuel J. Woods, Metcalfe.

Goose Wheat. Five entries.

1st.—Thos. B. Lush, Oustic.
2nd.—A. R. Wood, Fergus.
3rd.—W. A. Wilson, Sheridan.
4th.—Scanlon Bros., Ennotville.

Oats, White. Twelve entries.

1st.—And. Schmidt, Mildmay.
2nd.—C. E. Smith, Scotland.
3rd.—William Lewis, Dunsford.
4th.—Andrew Harmer, Plattsville.

Oats, Black. Seven entries.

1st.—Robert Talbot, Everton.
2nd.—Thos. B. Lush, Oustic.
3rd.—Andrew Schmidt, Mildmay.
4th.—Miss Mary Colwell, Paris Sta.

Barley, Six-rowed. Nine entries.

1st.—And. Schmidt, Mildmay.
2nd.—Walter Hartman, Clarksburg.
3rd.—Chas. Currie, Morriston.
4th.—Andrew Harmer, Plattsville.

Field Peas, large. Three entries.

1st.—Samuel J. Woods, Metcalfe.
2nd.—Robert Talbot, Everton.
3rd.—Miss Mary Colwell, Paris Sta.

Field Peas, small. Five entries.

1st.—Edward Buckland, Fergus.
2nd.—Thos. B. Lush, Oustic.
3rd.—Robert Talbot, Everton.
4th.—C. E. Smith, Scotland.

Red Clover. Two entries.

1st.—Geo. Baker, Simcoe.
2nd.—C. R. Gies, Heidelberg.

Alsike. Two entries.

1st.—Geo. Baker, Simcoe.
2nd.—C. E. Smith, Scotland.

Timothy. Three entries.

1st.—Walter Hartman, Clarksburg.
2nd.—W. A. Wilson, Sheridan.
3rd.—Jacob Willsie, Thedford.

Corn, Flint, (in the Ear). Five entries.

1st.— J. O. Duke, Olinda.
2nd.—L. D. Harkinson Grovesend.
3rd.—Edward Smith, Ridgetown.
4th.—H. Smith, Ruthven.

Corn, Dent, (in the ear). Six entries.

1st.—G. W. Coatsworth & Son, Kingsville.
2nd.—A. H. Woodbridge, Kingsville.
3rd.—H. Smith, Ruthven.
4th.—J. O. Duke, Olinda.

Potatoes, long White Type. Eight entries.

1st.—Geo. N. Harris, Lynden.
2nd.—A. R. Wood, Fergus.
3rd.—F. W. Krouse, Guelph.
4th.—C. R. Gies, Heidelberg.

Potatoes, round White Type. Seven entries.

1st.—Robert Talbot, Everton.
2nd.—Jacob Willsie, Thedford.
3rd.—C. E. Smith, Scotland.
4th.—Geo. N. Harris, Lynden.

Potatoes, other than White. Ten entries.

1st.—Geo. N. Harris, Lynden.
2nd.—C. E. Smith, Scotland.
3rd.—Edward Buckland, Fergus.
4th.—David H. Taylor, Corwhin.

SPECIAL PRIZES OF THE CANADIAN SEED GROWERS' ASSOCIATION,

Fall Wheat, Hand Selected Seed from the First or Second Year's Breeding Plot. Two Entries.

1st.—Duncan Carmichael, West Lorne. 2nd.—W. M. Smith, Scotland.

Fall Wheat, Group Exhibits. Four entries.

1st.—C. R. Gies, Heidelberg. 2nd.—Herbert Davidson, Mount Nemo.

Spring Wheat, (Hand-selected seed from 1st or 2nd year's breeding plot). One entry.

2nd.—Robert N. Woods, Metcalfe.

Spring Wheat. Group Exhibits. One entry.

1st.—Robert McKay, Maxville.

White Oats, (Hand-selected seed from 1st or 2nd year's breeding plot). Two entries.

1st.—Robert N. Woods, Metcalfe. 2nd.—W. M. Smith, Scotland.

White Oats, Group Exhibits. Four entries.

1st.—David Prouse, Goderich. 3rd.—Wm. W. Ramage, Thistle.
2nd.—Duncan Carmichael, West Lorne.

Six-rowed Barley, (Hand-selected seed from 1st or 2nd year's breeding plot). One entry.

1st.—W. M. Smith, Scotland.

Six-rowed Barley. Group Exhibits. Four entries.

1st and 2nd.—Duncan Carmichael, West Lorne. 3rd.—Chas. L. Mackey, Kinsale

Corn, best 10 ears, any variety Flint, White.

1st.—G. W. Ryckman, McNab.

Corn, best 10 ears, any variety Flint, Yellow. Four entries.

1st.—Edward Smith, Ridgetown. 3rd.—H. Smith, Ruthven.
2nd.—L. D. Hankison, Gravesend. 4th.—D. G. Thomson, Cumming's Bridge.

Corn, Best 10 ears, any variety Dent Corn, White (White Cap Yellow included). Two entries.

1st.—H. Smith, Ruthven. 2nd.—Joseph C. Thomas, Blythswood.

Corn, best 10 ears, any variety Dent Corn, Yellow. Three entries.

1st.—G. W. Coatsworth & Son, Kingsville. 2nd.—A. H. Woodbridge, Kingsville.
3rd.—Duncan Carmichael, West Lorne.

Corn, Best 10 ears, any variety Sweet Corn (late). Two entries.

1st.—H. & J. McKee, Norwich. 2nd.—J. O. Duke, Olinda.

Corn, Best 10 ears, any variety Sweet Corn (early). Three entries.

1st.—J. O. Duke, Olinda. 2nd.—Chas. Pearce, Wellington.

Potatoes, round White Type. Four entries.

1st.—W. M. Smith, Scotland. 3rd.—Jacob Willsie, Thedford.
2nd.—F. W. Krouse, Guelph.

Potatoes, Long White Type. Two entries.

1st.—F. W. Krouse, Guelph.

Potatoes, Rose Type. Two entries.

1st.—W. M. Smith, Scotland. 2nd.—F. W. Krouse, Guelph.

BEST EXHIBIT OF 25 EARS OF CORN GROWN IN ONTARIO. SPECIAL.

1st.—Duncan Carmichael, West Lorne.

DAIRY TEST

Name of Animal and Exhibitor.	Lbs. of Milk.	% Fat.	Lbs. Fat.	Lbs. Solids not Fat.	Points for day's Milking.	Points for Fat.	Points for Solids not Fat.	Total Points
Class 45, Section 1—Shorthorn Cow, 48 months and over—								
1st, Kentucky Queen, 38948, James Brown, Norval	91.32	4.1	3.74	8.54	.....	93.5	25.62	119.12
2nd, Canadian Queen, Vol. 19, Geo. Armstrong, Speedside	103.87	3.1	3.22	9.45	2	80.5	28.35	110.85
Class 45, Section 2—Shorthorn Cow, 36 months and under 48—								
1st, Lady McKay 2nd, 69110, James Brown, Norval	97.33	4·2	4.09	8.86	2.3	102.25	26.58	131.13
2nd, Rose of Kentucky 34th, 69970, James Brown, Norval	89.08	3.6	3.21	7.79	.7	80.25	23.37	104.32
Class 45, Section 3—Shorthorn Heifer under 36 months—								
1st, Lady Guelph, 76721, James Brown, Norval	80.86	4.	3.23	7.33	.....	80.75	21.99	102.74
2nd, Gracey Gwynne, 80976, John Kelly, Shakespeare	53.32	4.4	2.35	4.89	.....	58.75	14.67	73.42
Class 46, Section 1—Ayrshire Cow, 48 months and over—								
1st, Jean Armour, 15591, Geo. Rice, Tillsonburg	114.26	3.8	4.34	10.40	.....	108.5	31.20	139.70
2nd, Sarah 2nd, 13192, H. & J. McKee, Norwich	115.56	3.5	4.04	10.34	.....	101.	31.02	132.02
3rd, Victoria, 13788, H. & J. McKee, Norwich	91.52	4.3	3.94	8.67	.....	98.5	26.01	124.51
4th, Pet of Hickory Hill, 21259, N Dymont, Clappison	91.67	3.8	3.48	7.63	.8	87.	22.89	110.69
Class 46, Section 2, Ayrshire Cow, 36 months and under 48—								
1st, White Rose 2nd, 17841, H. & J. McKee, Norwich	95.58	4.2	4 01	8.79	.4	100.25	26.37	127.02
2nd, Old Ada's Last, 17340, H. & J, McKee, Norwich	73.57	3.5	2.57	6.99	2.8	64.25	20.97	88.02
3rd, White Floss, 18652, Geo. Rice, Tillsonburg	55.83	4.1	2.29	5.11	3.7	57.25	15.33	76.28
Class 46, Section 3—Ayrshire Heifer, under 36 months—								
1st, White Floss of Brookside, 20139, H. & J. McKee, Norwich	67.38	3.4	2.29	6.10	.9	57.25	18.30	76.45
Class 47, Section 1—Holstein Cow, 48 months and over—								
1st, Evergreen March, 3896, G. W. Clemons, St. George	139.82	3.4	4.75	11.54	2.2	118.75	34.62	155.57
2nd, Beauty's Buffalo Girl, 3562, P. D. Ede, Oxford Centre	115.57	3.2	3.70	10.34	.....	92.50	31.02	123.52
3rd, Canary Starlight Lassie B, 3960, Geo. Rice, Tillsonburg	93.64	3.9	3.65	8.76	.....	91.25	26.28	117.53
Class 47, Section 2—Holstein Cow, 36 months and under 48—								
1st, Artalissa, 5845, Jas. Rettie, Norwich	116.75	3.1	3.62	9.77	1.6	90.5	29.31	121.41
2nd, Daisy Texal Posch, 5280, Geo Rice, Tillsonburg	109.01	3.	3.27	9.43	.....	81.75	28.29	110.04
Class 47, Section 3—Holstein Heifer, under 36 months—								
1st, Iantha Jewel Mechthilde 3rd, 5530, M. L. Haley, Springford	93.64	4.	3.75	9.04	.....	93.75	27.12	120.87
2nd, Iantha Jewel Posch, 6821, James Rettie, Norwich	108.32	3.2	3.47	9 21	1.8	86.75	27.63	116.18
3rd, Ina Pauline Mercedes, 6063, H. Bollert, Cassel	92.68	3.7	3.43	8.39	.5	85.75	25.17	111.42
4th, Queen Pietertje Mercedes 2nd, 6094, Geo. Rice, Tillsonburg	71.87	3.6	2.59	6.68	.....	64.75	20.04	84.79

POULTRY.

List gives number of entries and awards in each section. For post office address of exhibitors, see page 288.

Light Brahmas.

Cocks, 11.—1st and 2nd, H. W. Partlo; 3rd, L. C. Sage.
Hens, 11.—1st and 3rd, H. W. Partlo; 2nd, L. C. Sage.
Cockerels, 11.—1st, H. W. Partlo; 2nd, G. E. McIntosh; 3rd, W. B. Nantel.
Pullets, 12.—1st, H. W. Partlo; 2nd, G. E. McIntosh; 3rd, John Morrow; 4th, W. B. Nantel.

Dark Brahmas.

Cocks, 6.—1st, L. C. Sage; 2nd and 3rd, C. A. R. Tilt.
Hens, 7.—1st and 3rd, L. C. Sage; 2nd, W. B. Nantel.
Cockerels, 4.—1st, C. A. R. Tilt; 2nd, W. B. Nantel; 3rd, W. C. Wilson & Son.
Pullets, 5.—1st, Wm. C. Wilson & Son; 2nd and 3rd, L. C. Sage.

Buff Cochins.

Cocks, 5.—1st and 2nd, Holmhurst Poultry Yards; 3rd, W. B. Nantel.
Hens, 8.—1st and 3rd, Hugh Wyatt; 2nd, Holmhurst Poultry Yards.
Cockerels, 5.—1st and 2nd, Hugh Wyatt; 3rd, Holmhurst Poultry Yards.
Pullets, 9.—1st and 3rd, Hugh Wyatt; 2nd, W. B. Nantel.

Partridge Cochins.

Cocks, 6.—1st, W. C. Wilson & Sons; 2nd and 3rd, W. B. Nantel.
Hens, 6.—1st, Richard Oke; 2nd, Richard Oke; 3rd, F. Wales.
Cockerels, 6.—1st, Richard Oke; 2nd, W. B. Nantel; 3rd, Wm. C. Wilson & Sons.
Pullets, 9.—1st, Richard Oke; 2nd, F Wales; 3rd, John Handley.

Black Cochins.

Hens, 3.—1st, W. B. Nantel.
Cockerels, 4.—1st, Henry Emrick; 2nd, A. J. George; 3rd, W. B. Nantel.
Pullets, 4.—1st and 2nd, Henry Emrick; 3rd, W. B. Nantel.

White Cochins.

Cocks, 4.—1st and 2nd, W. B. Nantel.
Hens, 5.—1st and 2nd, W. B. Nantel; 3rd, Henry Emrick.
Cockerels, 4.—1st, W. B. Nantel; 2nd, Henry Emrick.
Pullets, 4.—1st, Henry Emrick; 2nd, W. B. Nantel.

Black Langshans.

Cocks, 5.—1st and 2nd, R. McCurdy; 3rd, John Burgess.
Hens, 6.—1st, John Burgess; 2nd, R. McCurdy; 3rd, C. A. R. Tilt.
Cockerels, 5.—1st and 3rd, R. McCurdy; 2nd, C. A. R. Tilt.
Pullets, 5.—1st and 3rd, R. McCurdy; 2nd, C. A. R. Tilt.

A. O. C. Langshans.

Cocks, 5.—1st, Philpot Bros.; 2nd and 3rd, W. J. Teale.
Hens, 8.—1st, 2nd and 3rd, Philpot Bros.
Cockerels, 7.—1st, 2nd and 3rd, Philpot Bros.
Pullets, 7.—1st and 2nd, W. J. Teale; 3rd, Philpot Bros.

Barred Plymouth Rocks.

Cocks, 22.—1st and 3rd, I. K. Millard & Son; 2nd, F. W. Krouse; 4th and 5th, Newton Cosh.
Hens, 24.—1st, 3rd and 4th, Newton Cosh; 2nd, I. K. Millard & Son, 5th, John Pringle.
Cockerels, 40.—1st, John Pringle; 2nd, 3rd, 8th, 9th, I. K. Millard & Son; 4th, 5th, 7th and 10th, Newton Cosh; 6th, C. Hockin.
Pullets, 42.—1st, John Pringle; 2nd, 3rd, 7th and 10th, Newton Cosh; 4th, C. Hockin; 6th, 8th, and 9th, I. K. Millard & Son; 5th, Jas. Hodge.

White Plymouth Rocks.

Cocks, 23.—1st and 4th, Thos. Rice; 2nd. F. A. Andrews; 3rd, F. A. Andrews; 5th, Geo. A. Robertson.

Hens, 35.—1st, 2nd, and 5th, Geo. A Robertson; 3rd, 6th and 8th, Wm. E. Hogarth; 4th and 10th, F. A. Andrews; 7th, Thos. Rice; 9th, John L. Brown.

Cockerels, 41.—1st, John L. Brown; 2nd and 10th, F. A. Andrews; 3rd, J. A. Carroll; 4th, Guy Bell; 5th, R. G. Murdie; 6th, Geo. E. Munro; 7th, Geo. A. Robertson; 8th, Geo. E. Munro; 9th, Wm. E. Hogarth.

Pullets, 46.—1st and 9th, John L. Brown; 2nd and 8th, Wm. E. Hogarth; 3rd and 10th, F. A. Andrews; 4th and 6th, Geo. A. Robertson; 5th, Thos. Rice; 7th, Geo. M. Shepherdson.

Buff Plymouth Rocks.

Cocks, 5.—1st, John Bawden; 2nd, Woodward Poultry Farm; 3rd, J. A. Harron.

Hens, 6.—1st and 2nd, J. A. Harron; 3rd, John Bawden.

Cockerels, 10.—1st and 2nd, John Bawden; 3rd, J. A. Harron.

Pullets, 9.—1st and 2nd, John Bawden; 3rd, Peter Gould.

Golden Laced Wyandottes.

Cocks, 13.—1st, Wm. Daniel; 2nd, John Macpherson; 3rd, Peter Daley & Son; 4th, Christian Poultry Farm.

Hens, 16.—1st and 2nd, Christian Poultry Farm; 3rd, W. Lemon; 4th, Wm. Daniel.

Cockerels, 18.—1st, 2nd and 3rd, J. H. Magill; 4th, Peter Daley & Son.

Pullets, 15.—1st and 2nd, John Macpherson; 3rd, J. H. Magill; 4th, Wm. Daniel.

Silver Laced Wyandottes.

Cocks, 12.—1st, Christian Poultry Farm; 2nd, F. W. Krouse; 3rd, James Arthur, 4th, Hintonburg Poultry Yards.

Hens, 8.—1st, Hintonburg Poultry Yards; 2nd and 3rd, Wilber Lemon.

Cockerels, 16.—1st, James Baptie; 2nd, Alfred Flawn; 3rd, Hintonburg Poultry Yards; 4th, Wilber Lemon.

Pullets, 18.—1st and 2nd, Hintonburg Poultry Yards; 3rd, Wilber Lemon; 4th, James Arthur.

Black Wyandottes.

Cocks, 6.—1st, J. R. Smith; 2nd, J. R. Smith; 3rd, H. Fraleigh.

Hens, 10.—1st and 2nd, J. R. Smith; 3rd, R. Dinner.

Cockerels, 7.—1st and 2nd, J. R. Smith; 3rd, H. Fraleigh.

Pullets, 9.—1st, J. R. Smith; 2nd, H. Fraleigh; 3rd, G. & J. Bogue.

Buff Wyandottes.

Cocks, 12.—1st, J. C. Sanderson; 2nd, A. W. Graham; 3rd, Spry & Mick; 4th, J. Hughes Samuel.

Hens, 12.—1st, J. C. Sanderson; 2nd, Rev. R. A. Spencer; 3rd, Clarence Allison; 4th, Spry & Mick.

Cockerels, 11.—1st and 2nd, Spry & Mick; 3rd, James Dundas.

Pullets, 17.—1st and 4th, Wm. Moebus & Son; 2nd, J. Hughes Samuel; 3rd, Rev. R. A. Spencer.

Silver Pencilled Wyandottes.

Cocks, 6.—1st, J. M. Thorpe; 2nd, Rev. W. N. Scott; 3rd, Erhard Loehr.

Hens, 7.—1st, J. M. Thorpe; 2nd, Rev. W. N. Scott; 3rd, Rev. R. A. Spencer.

Cockerels, 6.—1st, J. M. Thorpe; 2nd, Rev. R. A. Spencer; 3rd, Erhard Loehr.

Pullets, 6.—1st, J. M. Thorpe; 2nd, Erhard Loehr; 3rd, Rev. W. N. Scott.

White Wyandottes.

Cocks, 41.—1st, John S. Martin; 2nd, Harvey A. Ross; 3rd, 4th and 11th, Chas. Massie;; 5th and 10th, Devitt & Holman; 6th, Wright Bros.; 7th and 8th, John Bedford; 9th, W. Dawson.

Hens, 49.—1st, 2nd, and 3rd, John S. Martin; 4th, 5th, 8th and 10th, W. Dawson; 6th and 9th, Chas. Massie; 7th, L. H. Baldwin.

Cockerels, 61.—1st, 3rd, 7th, 8th and 9th, John S. Martin; 2nd, 5th, 6th and 10th, W. Dawson; 4th, Chas. Massie.

Pullets, 62.—1st, 2nd and 6th, John S. Martin; 3rd, L. H. Baldwin; 4th, Geo. Brierly; 5th, W. Dawson; 7th, Wm. Wilson; 8th, Miss Bona E. R. Case; 9th, Harry A. Ross; 10th and 11th, Chas. Massie.

PARTRIDGE WYANDOTTES.

Cocks, 12.—1st, Arthur Hedden; 2nd and 3rd, L. C. Sage; 4th, J. E. Fidler.
Hens, 10.—1st, J. E. Fidler; 2nd, Will Monahan; 3rd, Christian Poultry Farm.
Cockerels, 7.—1st, Arthur Hedden; 2nd and 3rd, J. E. Fidler.
Pullets, 11.—1st and 2nd, Will Monahan; 3rd, J. E. Fidler.

COLUMBIAN WYANDOTTES.

Cocks, 11.—1st, 2nd and 3rd, T. H. Scott.
Hens, 11.—1st, T. H. Scott; 2nd, A. F. Soole; 3rd, F. L. Willis.
Cockerels, 20.—1st, R. C. Middlemess; 2nd, W. Dawson 3rd and 4th, Schelly Bros.; 5th, C. P. Brown.
Pullets, 30.—1st, 3rd, 5th and 7th, W. Dawson; 2nd, Schelly Bros.; 4th, T. H. Scott; 6th, F. L. Willis; 8th, A. F. Soole; 9th and 10th, C. P. Brown.

DOMINIQUES.

Cocks, 2.—1st, G. B. Carbert; 2nd, George Burn.
Hens, 3.—1st and 2nd, Geo. Burn; 3rd, G. B. Carbert.
Cockerels, 4.—1st and 2nd, G. B. Carbert; 3rd, A. G. H. Luxton.
Pullets, 5.—1st and 2nd, G. B. Carbert; 3rd, George Burn.

BLACK JAVAS.

Cocks, 4.—1st, G. & J. Bogue; 2nd, Richard Oke; 3rd, W. R. Knight.
Hens, 5.—1st, G. & J. Bogue; 2nd and 3rd, F. W. Krouse.
Cockerels, 3.—1st, W. R. Knight; 2nd, Richard Oke; 3rd, F. W. Krouse.
Pullets, 4.—1st, G. & J. Bogue; 2nd, W. R. Knight; 3rd, Richard Oke.

MOTTLED JAVAS.

Cocks, 2.—1st, G. & J. Bogue; 2nd, Richard Oke.
Hens, 2.—1st, G. & J. Bogue; 2nd, Richard Oke.
Cockerels, 2.—1st, Richard Oke; 2nd, G. & J. Bogue.
Pullets, 2.—1st, G. & J. Bogue; 2nd, Richard Oke.

S. C. RHODE ISLAND REDS.

Cocks, 5.—1st, Emil Wankel & Son; 2nd, J. E. Klager; 3rd, S. H. Smiley.
Hens, 7.—1st, Emil Wankel & Son; 2nd, W. A. McMaster; 3rd, J. E. Klager.
Cockerels. 17.—1st, Woodward Poultry Farm; 2nd, Emil Wankel & Son; 3rd, Hughes & Burns; 4th, C. J. Daniels.
Pullets, 17.—1st, Jno. Luscombe; 2nd, Hughes & Burns; 3rd and 4th, Wm. J Mihm.

R. C. RHODE ISLAND REDS.

Cocks, 9.—1st, Emil Wankel & Son; 2nd, John Luscombe; 3rd, Geo. L. Baker.
Hens, 8.—1st, Lewis Doe; 2nd, S. H. Smiley; 3rd, Emil Wankel & Son.
Cockerels, 20.—1st, Hughes & Burns; 2nd, Emil Wankel & Son; 3rd, A. W. Graham; 4th, J. E. Klager.
Pullets, 25.—1st, Hughes & Burns; 2nd, S. H. Smiley; 3rd and 4th, Geo. C. Lapsley; 5th, Emil Wankel & Son.

BLACK RED GAME.

Cocks, 2.—1st, Thos. Parrott; 2nd, John W. Roberts.
Hens, 4.—1st, John W. Roberts; 2nd and 3rd, Thos. Parrott.
Cockerels, 3.—1st, John W. Roberts; 2nd and 3rd, Thos. Parrott.
Pullets, 3.—1st, John W. Roberts; 2nd and 3rd, Thos. Parrott.

BROWN RED GAME.

Cocks, 5.—1st and 3rd, Telfer Bros.; 2nd, W. Barber.
Hens, 6.—1st, W. Barber; 2nd and 3rd, Telfer Bros.
Cockerels, 3.—1st, W. Barber; 2nd and 3rd, Telfer Bros.
Pullets, 3.—1st and 2nd, Telfer Bros.; 3rd, W. Barber.

DUCKWING GAMES.

Cocks, 2.—1st, W. Barber; 2nd, Telfer Bros.
Hens, 3.—1st and 2nd, W. Barber; 3rd, Telfer Bros.
Cockerels, 6.—1st, Farrell & Vance; 2nd, W. Barber; 3rd, Telfer Bros.
Pullets, 3.—1st and 3rd, W. Barber; 2nd, Telfer Bros.

Pyle Game.

Cocks, 3.—1st and 2nd, Thomas Sherlock; 3rd, George Burn.
Hens, 2.—1st and 2nd, Thomas Sherlock.
Cockerels, 5.—1st, Telfer Bros.; 2nd and 3rd, Thos. Sherlock.
Pullets, 6.—1st and 3rd, Thos. Sherlock; 2nd, Telfer Bros.

Indian Game, Any Variety.

Cocks, 5.—1st and 2nd, Topping & Finchamp; 3rd, Nixon Bros.
Hens, 10.—1st, Nixon Bros.; 2nd and 3rd, Topping & Finchamp.
Cockerels, 9.—1st, Geo. Robertson; 2nd and 3rd, Nixon Bros.
Pullets, 8.—1st, Nixon Bros.; 2nd, Geo. Robertson; 3rd, Topping & Finchamp.

Black Sumatra Game.

Cocks, 4.—1st and 3rd, Frank Shaw; 2nd, W. W. Cutler.
Hens, 5.—1st, C. J. Daniels; 2nd and 3rd, Frank Shaw.
Cockerels, 2.—1st, Frank Shaw.
Pullets, 3.—1st, Frank Shaw.

Birchen Game.

Cocks, 1.—1st, W. Barber.
Hens, 1.—1st, W. Barber.

A. O. S. V. Game.

Cocks, 4.—1st, Wm. Pearson; 2nd, George Burn; 3rd, R. H. Barber.
Hens, 5.—1st and 3rd, George Burn; 2nd, Wm. Pearson.
Cockerels, 5.—1st, George Burn; 2nd, R. H. Barber; 3rd, Liddon Bros.
Pullets, 5.—1st, George Burn; 2nd, Liddon Bros.; 3rd, Wm. Pearson.

R. C. White Leghorns.

Cocks, 4.—1st, Richard Oke; 2nd, M. R. Hoover; 3rd, A. & T. Readwin.
Hens, 7.—1st, M. R. Hoover; 2nd, Richard Oke; 3rd, A. & T. Readwin.
Cockerels, 12.—1st and 3rd, A. J. Morgan; 2nd and 4th, W. J. Bell.
Pullets, 10.—1st, W. J. Bell; 2nd, M. R. Hoover; 3rd, A. J. Morgan.

S. C. White Leghorns.

Cocks, 15.—1st and 4th, J. R. Laidlaw; 2nd, Dr. R. C. Coats; 3rd, Jas. L. McCormack.
Hens, 17.—1st, Dr. R. C. Coats; 2nd, Jas. L. McCormack; 3rd, Wm. Ferguson; 4th, J. R. Laidlaw.
Cockerels, 39.—1st and 2nd, Jas. L. McCormack; 3rd, 8th, 9th and 10th, Wm. Ferguson; 4th and 7th, Dr. R. C. Coats; 5th, J. R. Laidlaw; 6th, Thos. Rice.
Pullets, 29.—1st, 2nd, 3rd and 5th, Jas. L. McCormack; 4th and 8th, Wm. Ferguson; 6th and 10th, Dr. R. C. Coats; 7th, J. R. Laidlaw; 9th, Wm. E. Hogarth.

Black Leghorns.

Cocks, 4.—1st, F. W. Hodgkin; 2nd and 3rd, A. C. Doan.
Hens, 8.—1st and 3rd, A. C. Doan; 2nd, J. H. Edsall.
Cockerels, 12.—1st, W. M. Osborne; 2nd, J. H. Edsall; 3rd and 4th, A. C. Doan.
Pullets, 13.—1st, Geo. Robertson; 2nd, W. M. Osborne; 3rd, J. H. Edsall; 4th, A. & T. Readwin.

R. C. Brown Leghorns.

Cocks, 7.—1st, Wm. C. Wilson & Sons; 2nd and 3rd, Wm. Cadman.
Hens, 11.—1st and 2nd, Wm. Cadman; 3rd, Irwin & Yelland.
Cockerels, 12.—1st and 3rd, Wm. Cadman; 2nd and 4th, Wm. C. Wilson & Sons.
Pullets, 12.—1st, T. J. Conley; 2nd and 3rd, Wm. Cadman; 4th, Wm. C. Wilson & Sons.

S. C. Brown Leghorns.

Cocks, 15.—1st, John Bradley; 2nd, Jacob Straub; 3rd, W. A. Gurney; 4th, G. G. Henderson.
Hens, 20.—1st and 2nd, W. A. Gurney; 3rd, Jacob Straub; 4th, G. G. Henderson; 5th, Orr & Creedon.
Cockerels, 31.—1st John Bradley; 2nd and 6th, G. G. Henderson; 3rd, 4th, 5th, 8th, 9th and 10th, H. F. Becker; 7th, Orr & Creedon.
Pullets, 20.—1st and 5th, W. A. Gurney; 2nd and 4th, Orr & Creedon; 3rd, Irwin & Yelland.

BUFF LEGHORNS.

Cocks, 4.—1st and 2nd, Nate K. Cornwall; 3rd, J. A. Harron.
Hens, 5.—1st and 3rd, J. A. Harron; 2nd, Jas. Dundas.
Cockerels, 9.—1st, Jas. Dundas; 2nd, Nate K. Cornwall; 3rd, Rev. John D. Ellis.
Pullets, 11.—1st, Rev. John D. Ellis; 2nd, Jas. Dundas; 3rd, Nate K. Cornwall.

SPANISH.

Cocks, 2.—1st, G. & J. Bogue; 2nd, J. H. Warrington.
Hens, 2.—1st, J. H. Warrington; 2nd, G. & J. Bogue.
Cockerels, 2.—1st, J. H. Warrington; 2nd, Geo. Robertson.
Pullets, 5.—1st, J. H. Warrington; 2nd and 3rd, G. & J. Bogue.

S. C. BLACK MINORCAS.

Cocks, 9.—1st, J. H. Minshall; 2nd, Henry Dunne; 3rd, T. A. Faulds; 4th, G. A. McInnis.
Hens, 18.—1st, Chas. Garvett; 2nd, J. H. Minshall; 3rd, J. H. Minshall; 4th, T. A. Faulds.
Cockerels, 19.—1st, J. H. Minshall; 2nd and 4th, T. A. Faulds; 3rd, Henry Dunne.
Pullets, 18.—1st, 2nd, 3rd and 4th, Henry Dunne.

R. C. BLACK MINORCAS.

Cocks, 6.—1st and 2nd, J. H. Minshall; 3rd, T. A. Faulds
Hens, 5.—1st, T. A. Faulds; 2nd and 3rd, J. H. Minshall.
Cockerels, 6.—1st and 3rd, J. H. Minshall; 2nd, T. A. Faulds.
Pullets, 7.—1st and 2nd, T. A. Faulds; 3rd, J. H. Minshall.

WHITE MINORCAS.

Cocks, 3.—1st, A. C. Moyer; 2nd, G. J. Lawrie; 3rd, W. M. Osborne.
Hens, 3.—1st and 2nd, A. C. Moyer; 3rd, W. M. Osborne.
Cockerels, 4.—1st, 2nd and 3rd, A. C Moyer.
Pullets, 4.—1st and 2nd, A. C. Moyer; 3rd, W. M. Osborne.

ANDALUSIANS.

Cocks, 8.—1st, H. V. Cosh; 2nd and 3rd, Geo. T. Howard.
Hens, 10.—1st and 2nd, H. V. Cosh; 3rd, Geo. T. Howard.
Cockerels, 13.—1st, H. V. Cosh; 2nd, Geo. Robertson; 3rd, E. A. Carswell; 4th, John Pletsch.
Pullets, 11.—1st, Chas. Gorvett; 2nd and 3rd, Geo. T. Howard.

SILVER GREY DORKINGS.

Cocks, 8.—1st, F. W. Krouse; 2nd and 3rd, H. H. McKee.
Hens, 8.—1st and 2nd, H. H. McKee; 3rd, F. W. Krouse.
Cockerels, 8.—1st and 3rd, Jas. M. McCormack; 2nd, Wallace McGlennon.
Pullets, 8.—1st and 2nd, Jas. M. McCormack; 3rd, H. H. McKee.

COLORED DORKINGS.

Cocks, 3.—1st, G. & J. Bogue; 2nd, J. H. Warrington; 3rd, Jas. M. McCormack.
Hens, 5.—1st, G. & J. Bogue; 2nd and 3rd, Jas. M. McCormack.
Cockerels, 5.—1st, G. & J. Bogue; 2nd and 3rd, Jas. M. McCormack.
Pullets, 6.—1st, G. & J. Bogue; 2nd and 3rd, Geo. Robertson.

WHITE DORKINGS.

Cocks, 2.—1st, George Burn; 2nd, J. H. Warrington.
Hens, 2.—1st, J. H. Warrington; 2nd, George Burn.
Cockerels, 1.—1st, J. H. Warrington.
Pullets, 1.—1st, J. H. Warrington.

BUFF ORPINGTONS.

Cocks, 20.—1st and 3rd, A. W. E. Hellyer; 2nd, Alfred Boultbee; 4th, John A. Barr; 5th, J. W. Clark.
Hens, 24.—1st, Robert Barnes; 2nd, A. W. E. Hellyer; 3rd, J. K. Paul; 4th, John Bawden; 5th, E. Fraleigh.

Cockerels, 34.—1st, H. A. Hoffman; 2nd and 8th, A. W. E. Hellyer; 3rd, P. E. Aird; 4th, John Bawden; 5th, J. K. Paul; 6th, J. W. Clark; 7th, Robert Barnes; 9th, John A. Barr; 10th, G. B. Carbert.

Pullets, 36.—1st and 10th, Robert Barnes; 2nd, 3rd, 4th, 5th and 9th, A. W. E. Hellyer; 6th, John Bawden; 7th, Thos. O. Traplin; 8th, Harry L. Lush.

Black Orpingtons.

Cocks, 16.—1st and 3rd, Kemp & Waterman; 2nd, Thos. O'C. Traplin; 4th, Jas. R Hamilton.

Hens, 26.—1st, H. Fraleigh; 2nd, C. J. Daniels; 3rd, H. Fraleigh; 4th, Kemp & Waterman; 5th, H. Fraleigh.

Cockerels, 21.—1st, 2nd and 3rd, Kemp & Waterman; 4th, P. E. Aird; 5th, E. A. Rawlings.

Pullets, 21.—1st, H. Fraleigh; 2nd, H. A. Hoffman; 3rd, Kemp & Waterman; 4th, Robert Barnes; 5th, Jas. R. Hamilton.

White Orpingtons.

Cocks, 3.—1st, F. C. Bogarth.
Hens, 4.—1st and 2nd, F. C. Bogarth.
Cockerels, 7.—1st, 2nd and 3rd, F. H. J. Moore
Pullets, 12.—1st, 2nd and 3rd, F. H. J. Moore; 4th, Murray & Son.

Houdans.

Cocks, 14.—1st and 2nd, G. & J. Bogue; 3rd, Geo. DeGroff; 4th, Meadowbrook Farm.

Hens, 16.—1st and 3rd, G. & J. Bogue; 2nd and 4th, Meadowbrook Farm.

Cockerels, 15.—1st, Meadowbrook Farm; 2nd and 3rd, G. & J. Bogue; 4th, Geo. DeGroff.

Pullets, 14.—1st, 3rd and 4th, Meadowbrook Farm; 2nd, G. & J. Bogue.

Creve Coeurs.

Cocks, 3.—1st, G. & J. Bogue; 2nd, Richard Oke.
Hens, 3.—1st, G. & J. Bogue; 2nd, Richard Oke.
Cockerels, 2.—1st, G. & J. Bogue; 2nd, Richard Oke.
Pullets, 2.—1st, Richard Oke; 2nd, G. & J. Bogue.

LaFleche.

Cocks, 2.—1st, G. & J. Bogue; 2nd, Richard Oke.
Hens, 2.—1st, G. & J. Bogue; 2nd, Richard Oke.
Cockerels, 2.—1st, G. & J. Bogue; 2nd, Richard Oke.
Pullets, 2.—1st, Richard Oke; 2nd, G. & J. Bogue.

W. C. B. Polands.

Cocks, 5.—1st and 2nd, Wm. McNeil; 3rd, W. H. Bush & Son.
Hens, 7.—1st and 2nd, Wm. McNeil; 3rd, W. H. Bush & Son.
Cockerels, 7.—1st and 2nd, Wm. McNeil; 3rd, R. C. Middlemiss.
Pullets, 7.—1st and 2nd, Wm. McNeil; 3rd, W. H. Bush & Son.

Golden Polands.

Cocks, 2.—1st and 2nd, Wm. McNeil.
Hens, 2.—1st and 2nd, Wm. McNeil
Cockerels, 4.—1st and 2nd, Wm. McNeil; 3rd, W. A. McMaster.
Pullets, 4.—1st and 2nd, Wm. McNeil; 3rd, G. & J. Bogue.

Silver Polands.

Cocks, 3.—1st, Wm. McNeil; 2nd, G. & J. Bogue; 3rd, Geo. Burn.
Hens, 3.—1st, Wm. McNeil; 2nd, G. & J. Bogue; 3rd, Geo. Burn.
Cockerels, 3.—1st, G. & J. Bogue; 2nd, Wm. McNeil; 3rd, Geo. Burn.
Pullets, 3.—1st, Wm. McNeil; 2nd, G. & J. Bogue; 3rd, Geo. Burn.

White Polands.

Cocks, 2.—1st and 2nd, Wm. McNeil.
Hens, 2.—1st and 2nd, Wm. McNeil.
Cockerels, 2.—1st and 2nd, Wm. McNeil.
Pullets, 2.—1st and 2nd, Wm. McNeil.

Golden Bearded Polands.

Cocks, 2.—1st, Wm. McNeil; 2nd, G. & J. Bogue.
Hens, 2.—1st, G. & J. Bogue; 2nd, Wm. McNeil.
Cockerels, 2.—1st, G. & J. Bogue; 2nd, Wm. McNeil.
Pullets, 2.—1st, G. & J. Bogue; 2nd, Wm. McNeil.

Silver Bearded Polands.

Cocks, 2.—1st, Wm. McNeil; 2nd, G. & J. Bogue.
Hens, 2.—1st, Wm. McNeil; 2nd, G. & J. Bogue.
Cockerels, 2.—1st, Wm. McNeil; 2nd, G. & J. Bogue.
Pullets, 3.—1st, Wm. McNeil; 2nd, G. & J. Bogue; 3rd, J. H. Warrington.

White Bearded Polands.

Cocks, 2.—1st, Wm. McNeil; 2nd, Wm. McNeil.
Hens, 3.—1st and 3rd, Wm. McNeil; 2nd, Peter Gould.
Cockerels, 2.—1st and 2nd, Wm. McNeil.
Pullets, 2.—1st and 2nd, Wm. McNeil.

Buff Laced Polands.

Cocks, 2.—1st, Wm. McNeil; 2nd, G. & J. Bogue.
Hens, 2.—1st, G. & J. Bogue; 2nd, Wm. McNeil.
Cockerels, 3.—1st, Wm. McNeil; 2nd, G. & J. Bogue; 3rd, Peter Gould.
Pullets, 4.—1st, Wm. McNeil; 2nd, G. & J. Bogue; 3rd, J. H. Warrington.

Golden Spangled Hamburgs.

Cocks, 3.—1st, G. & J. Bogue; 2nd, Jas. Baptie; 3rd, Richard Oke.
Hens, 5.—1st and 2nd, Jas. Baptie; 3rd, Richard Oke.
Cockerels, 3.—1st, G. & J. Bogue; 2nd and 3rd, Richard Oke.
Pullets, 3.—1st, Richard Oke; 2nd, Jas. Baptie; 3rd, G. & J. Bogue.

Silver Spangled Hamburgs.

Cocks, 6.—1st, Jas. Baptie; 2nd, Harry T. Lush; 3rd, Richard Oke.
Hens, 7.—1st, Richard Oke; 2nd and 3rd, Jas. Baptie.
Cockerels, 5.—1st and 2nd, Richard Oke; 3rd, Jas. Baptie.
Pullets, 9.—1st and 2nd, Harry T. Lush; 3rd, Wm. Cadman.

Golden Pencilled Hamburgs.

Cocks, 2.—1st and 2nd, Richard Oke.
Hens, 1.—1st, Richard Oke.
Cockerels, 3.—1st and 2nd, Richard Oke; 3rd, G. & J. Bogue.
Pullets, 3.—1st and 2nd, Richard Oke; 3rd, G. & J. Bogue.

Silver Pencilled Hamburgs.

Cocks, 2.—1st and 2nd, Richard Oke.
Hens, 2.—1st and 2nd, Richard Oke.
Cockerels, 2.—1st and 2nd, Richard Oke.
Pullets, 2.—1st and 2nd, Richard Oke.

Black Hamburgs.

Cocks, 3.—1st and 2nd, Richard Oke; 3rd, Jas. Baptie.
Hens, 2.—1st and 2nd, Richard Oke.
Cockerels, 2.—1st and 2nd, Richard Oke.
Pullets, 2.—1st and 2nd, Richard Oke.

Red Caps.

Cocks, 5.—1st, Geo. W. Kinder; 2nd and 3rd, E. Wells, Jr.
Hens, 7.—1st, W. E. Wright; 2nd and 3rd, E. Wells, Jr.
Cockerels, 6.—1st, Geo. W. Kinder; 2nd, E. Wells, Jr.; 3rd, W. E. Wright.
Pullets, 4.—1st and 2nd, E. Wells, Jr.; 3rd, W. E. Wright.

SULTANS.

Cocks, 1.—1st, G. & J. Bogue.
Hens, 2.—1st, G. & J. Bogue; 2nd, Richard Oke.
Cockerels, 2.—1st, G. & J. Bogue; 2nd, Richard Oke.
Pullets, 2.—1st, G. & J. Bogue; 2nd, Richard Oke.

SILKIES.

Cocks, 3.—1st, Teddy Saunders; 2nd, H. B. Donovan; 3rd, C. J. Daniels.
Hens, 3.—1st, H. B. Donovan; 2nd, Teddy Saunders; 3rd, C. J. Daniels.
Cockerels, 4.—1st, H. B. Donovan; 2nd and 3rd, Teddy Saunders.
Pullets, 3.—1st and 2nd, Teddy Saunders; 3rd, C. J. Daniels.

A. O. V. FOWL.

Cocks, 3.—1st, Wm. McNeil; 2nd, W. E. Raymo; 3rd, W. Geo. Cavan.
Hens, 5.—1st, Wm. McNeil; 2nd, W. E. Raymo; 3rd, W. Dawson.
Cockerels, 8.—1st, Wm. McNeil; 2nd, Peter P. Becker; 3rd, W. E. Raymo.
Pullets, 7.—1st, Wm. McNeil; 2nd, Peter P. Becker; 3rd, Peter P. Becker.

BLACK RED GAME BANTAMS.

Cocks, 8.—1st and 2nd, Rook Bros.; 3rd, Wm. Barber.
Hens, 13.—1st, W. R. Walker; 2nd Rook Bros.; 3rd, W. Barber; 4th, Chas. R. Crowe.
Cockerels, 19.—1st, 2nd, 3rd and 4th, Chas. R. Crowe.
Pullets, 16.—1st and 4th, Chas. R. Crowe; 2nd, W. Barber; 3rd, W. R. Walker.

BROWN RED GAME BANTAMS.

Cocks, 4.—1st and 2nd, W. Barber; 3rd, Tyson & McMaster.
Hens, 8.—1st, W. R. Walker; 2nd, W. Barber; 3rd, Tyson & McMaster.
Cockerels, 6.—1st, W. R. Walker; 2nd and 3rd, W. Barber.
Pullets, 9.—1st, Chas. R. Crowe; 2nd, W. Barber; 3rd, Tyson & McMaster.

DUCKWING GAME BANTAMS.

Cocks, 7.—1st, Spiers Bros.; 2nd, W. Barber; 3rd, Tyson & McMaster.
Hens, 6.—1st, Tyson & McMaster; 2nd and 3rd, Rook Bros.
Cockerels, 7.—1st, Thos. Sherlock; 2nd, Spiers Bros.; 3rd, W. Barber.
Pullets, 9.—1st and 2nd, Spiers Bros.; 3rd, Tyson & McMaster.

PYLE GAME BANTAMS.

Cocks, 7.—1st and 2nd, Thos. Bower; 3rd, Tyson & McMaster.
Hens, 11.—1st and 2nd, Tyson & McMaster; 3rd, Thos. Bower.
Cockerels, 13.—1st, 2nd and 3rd, Thos. Bower; 4th, W. Barber.
Pullets, 16.—1st, Hart & Grimoldby; 2nd and 4th, Thos. Bower; 3rd, W. Barber.

WHITE GAME BANTAMS.

Cocks, 3.—1st, 2nd and 3rd, H. B. Donovan.
Hens, 4.—1st, 2nd and 3rd, H. B. Donovan.
Cockerels, 4.—1st, 2nd and 3rd, H. B. Donovan.
Pullets, 5.—1st, 2nd and 3rd, H. B. Donovan.

BIRCHEN GAME BANTAMS.

Cocks, 4.—1st, J. E. Bailey; 2nd, H. B. Donovan; 3rd, Tyson & McMaster.
Hens, 6.—1st, H. B. Donovan; 2nd and 3rd, Rook Bros.
Cockerels, 6.—1st, Rook Bros.; 2nd and 3rd, H. B. Donovan.
Pullets, 5.—1st and 3rd, Tyson & McMaster; 2nd, H. B. Donovan.

A. O. V. GAME BANTAMS.

Cocks, 2.—1st, H. B. Donovan; 2nd, Doidge & McNeil.
Hens, 5.—1st, Doidge & McNeil; 2nd, H. B. Donovan; 3rd, W. R. Walker.
Cockerels, 2.—1st, Doidge & McNeil; 2nd, H. B. Donovan.
Pullets, 5.—1st, H. B. Donovan; 2nd Doidge & McNeil; 3rd, Rook Bros.

GOLDEN SEBRIGHT BANTAMS.

Cocks, 7.—1st and 2nd, Richard Oke; 3rd, W. Howard.
Hens, 8.—1st and 2nd, Richard Oke; 3rd, L. Austin Brill.
Cockerels, 5.—1st, G. & J. Bogue; 2nd, L. A. Brill; 3rd, Richard Oke.
Pullets, 4.—1st, Richard Oke; 2nd, G. & J. Bogue; 3rd, L. A. Brill.

SILVER SEBRIGHT BANTAMS.

Cocks, 6.—1st, T. J. Kiley; 2nd, L. A. Brill; 3rd, Richard Oke.
Hens, 7.—1st and 2nd, Richard Oke; 3rd, T. J. Kiley.
Cockerels, 8.—1st, Richard Oke; 2nd, G. & J. Bogue; 3rd, L. A. Brill.
Pullets, 8.—1st, T. J. Kiley; 2nd, H. A. Ross; 3rd, W. J. Slessor.

BLACK ROSE COMB BANTAMS.

Cocks, 9.—1st, Richard Oke; 2nd, J. T. Isbell; 3rd, R. L. Wheadon.
Hens, 10.—1st, J. T. Isbell; 2nd, W. H. Bush & Son; 3rd, R. L. Wheadon.
Cockerels, 13.—1st, R. L. Wheadon, 2nd, Richard Oke; 3rd, L. A. Brill; 4th, J. H. Westbrook.
Pullets, 13.—1st, R. L. Wheadon; 2nd, Richard Oke; 3rd and 4th, J. T. Isbell.

WHITE ROSE COMB BANTAMS.

Cocks, 3.—1st, Richard Oke; 2nd and 3rd, J. T. Isbell.
Hens, 7.—1st, H. B. Donovan; 2nd, J. T. Isbell; 3rd, T. J. Kiley.
Cockerels, 5.—1st, J. T. Isbell; 2nd, Richard Oke; 3rd, L. A. Brill.
Pullets, 6.—1st, Richard Oke; 2nd, L. A. Brill; 3rd, J. T. Isbell.

WHITE COCHIN BANTAMS.

Cocks, 4.—1st, 2nd and 3rd, Doidge & McNeil.
Hens, 6.—1st, 2nd and 3rd, Doidge & McNeil.
Cockerels, 8.—1st, 2nd and 3rd, Doidge & McNeil.
Pullets, 7.—1st, 2nd and 3rd, Doidge & McNeil.

BUFF COCHIN BANTAMS.

Cocks, 6.—1st and 2nd, Rosser Bros.; 3rd, Doidge & McNeil.
Hens, 6.—1st and 2nd, Rosser Bros.; 3rd, Doidge & McNeil.
Cockerels, 5.—1st, Rosser Bros.; 2nd, Robert Barnes; 3rd, F. M. Briggs.
Pullets, 14.—1st, Rosser Bros : 2nd, L. A. Brill; 3rd, Robert Barnes; 4th, C. A. R. Tilt.

BLACK COCHIN BANTAMS.

Cocks, 11.—1st, H. Fraleigh; 2nd, W. J. Slessor; 3rd, Doidge & McNeil.
Hens, 14.—1st, W. J. Slessor; 2nd and 4th, Doidge & McNeil; 3rd, H. Fraleigh.
Cockerels, 12.—1st, H. Fraleigh; 2nd, F. M. Briggs; 3rd, Doidge & McNeil; 4th, W. J. Slessor.
Pullets, 14.—1st and 2nd, H. Fraleigh; 3rd, W. J. Slessor; 4th, F. M. Briggs.

PARTRIDGE COCHIN BANTAMS.

Cocks, 4.—1st, Wm. Cadman; 2nd, L. A. Brill.
Hens, 7.—1st and 2nd, Wm. Cadman; 3rd, Wm. Cadman.
Cockerels, 4.—1st, L. A. Brill; 2nd, Wm. Cadman.
Pullets, 5.—1st, L. A. Brill; 2nd and 3rd, Wm. Cadman.

WHITE BOOTED BANTAMS.

Cocks, 4.—1st, T. J. Kiley; 2nd, W. J. Teale.
Hens, 6.—1st and 3rd, W. J. Teale; 2nd, T. J. Kiley.
Cockerels, 4.—1st, W. J. Teale; 2nd, Richard Oke.
Pullets, 4.—1st, W. J. Teale; 2nd, T. J. Kiley; 3rd, Richard Oke.

BLACK TAILED JAPANESE BANTAMS.

Cocks, 4.—1st and 2nd, Richard Oke.
Hens, 4.—1st and 2nd, Richard Oke.
Cockerels, 4.—1st, Richard Oke; 2nd, T. J. Kiley; 3rd, L. A. Brill.
Pullets, 4.—1st, Richard Oke; 2nd, L. A. Brill; 3rd, T. J. Kiley.

White Japanese Bantams.

Cocks, 7.—1st, Richard Oke; 2nd and 3rd, G. A. McInnis.
Hens, 10.—1st, Richard Oke; 2nd, G. A. McInnis; 3rd, H. B. Donovan.
Cockerels, 2.—1st, H. B. Donovan; 2nd, Richard Oke.
Pullets, 4.—1st, H. B. Donovan; 2nd, L. A. Brill.

Black Japanese Bantams.

Cocks, 7.—1st, Geo. Burn; 2nd and 3rd, H. B. Donovan.
Hens, 7.—1st, T. J. Kiley; 2nd, H. B. Donovan; 3rd, Geo. Burn.
Cockerels, 4.—1st, Richard Oke; 2nd, H. B. Donovan.
Pullets, 4.—1st and 2nd, Richard Oke; 3rd, H. B. Donovan.

Polish Bearded Bantams.

Cocks, 5.—1st, Richard Oke; 2nd and 3rd, T. J. Kiley.
Hens, 6.—1st, J. T. Isbell; 2nd, T. J. Kiley; 3rd, Richard Oke.
Cockerels, 5.—1st and 2nd, J. T. Isbell; 3rd, T. J. Kiley.
Pullets, 5.—1st and 2nd, J. T. Isbell; 3rd, Richard Oke.

Unbearded Polish Bantams.

Cocks, 4.—1st, H. B. Donovan; 2nd, Richard Oke.
Hens, 4.—1st, H. B. Donovan; 2nd, Richard Oke.
Cockerels, 3.—1st, Richard Oke; 2nd, H. B. Donovan; 3rd, J. T. Isbell.
Pullets, 3.—1st, J. T. Isbell; 2nd, H. B. Donovan; 3rd, Richard Oke.

Brahma Bantams.

Cocks, 6.—1st and 3rd, Robert T. Dickie; 2nd, H. B. Donovan.
Hens, 7.—1st and 3rd, Robert T. Dickie; 2nd, H. W. Partlo.
Cockerels, 3.—1st, H. W. Partlo; 2nd, Robt. T. Dickie; 3rd, Walter E. Raymo.
Pullets, 6.—1st and 2nd, Robt. T. Dickie; 3rd, H. W. Partlo.

A. O. V. Bantams.

Cocks, 7.—1st, Richard Oke; 2nd, T. J. Kiley; 3rd, W. E. Raymo.
Hens, 8.—1st, Geo. Burn; 2nd, Richard Oke; 3rd, T. J. Kiley.
Cockerels, 7.—1st, Richard Oke; 2nd, H. B. Donovan; 3rd, Walter E. Raymo.
Pullets, 5.—1st and 3rd, H. B. Donovan; 2nd, W. E. Raymo.

Bronze Turkeys, 2 years and up.

Cocks, 4.—1st, W. J. Bell; 2nd, A. McDougall & Son; 3rd, Chas. Gould; 4th, Woodrow & Sons.
Hens, 5.—1st, 2nd and 3rd, W. J. Bell; 4th, W. E. Wright; 5th, A. McDougall & Son.

Bronze Turkeys under 2 years.

Cocks, 10.—1st, Chas. Gould; 2nd, W. J. Bell; 3rd, Thos. Warrod; 4th, W. E. Wright; 5th, A. McDougall & Son.
Hens, 11.—1st, 3rd and 4th, W. J. Bell; 2nd and 5th, Chas. Gould.
Cockerels, 11.—1st and 2nd, W. J. Bell; 3rd, 4th and 5th, Chas. Gould.
Pullets, 11.—1st, W. J. Bell; 2nd, Woodrow & Sons; 3rd, W. E. Wright; 4th, Chas. Gould; 5th, Thos. Worrod.

White Turkeys.

Cocks, 1.—1st, Geo. Baker.
Hens, 3.—1st, Miss Mary Colwell; 2nd, A. G. H. Luxton; 3rd, Geo. Baker.
Cockerels, 4.—1st, A. G. H. Luxton; 2nd and 3rd, Baker Bros.; 4th, Geo. Baker.
Pullets, 5.—1st and 2nd, Baker Bros.; 3rd and 4th, A. G. H. Luxton; 5th, Geo. Baker.

A. O. V. Turkeys.

Cocks, 3.—1st, W. J. Alexander; 2nd and 3rd, A. G. H. Luxton.
Hens, 3.—1st, W. J. Alexander; 2nd, A. G. H. Luxton.
Cockerels, 3.—1st, W. J. Alexander.
Pullets, 3.—1st, W. J. Alexander; 2nd and 3rd, A. G. H. Luxton.

Toulouse Geese.

Ganders, 10.—1st, Miss Mary Colwell; 2nd, Geo. Burn; 3rd and 4th, Thos. M. Shea.
Geese, 10.—1st, Miss Mary Colwell; 2nd, Geo. Burn; 3rd, Scanlon Bros.; 4th, Baker Bros.
Ganders, 1907, 8.—1st, Baker Bros.; 2nd, Miss Mary Colwell; 3rd, Jas. M. McCormack; 4th, Thos. M. Shea.
Geese, 1907, 8.—1st Baker Bros.; 2nd, Miss Mary Colwell; 3rd, Jas. M. McCormack; 4th, Thos. M. Shea.

Embden Geese.

Ganders, 8.—1st, Baker Bros.; 2nd, C. A. R. Tilt; 3rd, A. McDougall & Son; 4th, Miss Mary Colwell.
Geese, 8.—1st, Scanlon Bros.; 2nd, A. McDougall & Son; 3rd, C. A. R. Tilt; 4th, Miss Mary Colwell.
Ganders, 1907, 6.—1st, Baker Bros.; 2nd and 4th, Miss Mary Colwell; 3rd, C. A. R. Tilt.
Geese, 1907, 5.—1st, A. McDougall & Son; 2nd, C. A. R. Tilt; 3rd and 4th, Miss Mary Colwell.

Chinese Geese.

Ganders, 6.—1st, G. B. Carbert; 2nd, Geo. Burn; 3rd, G. J. Lawrie; 4th, A. G. H. Luxton.
Geese, 6.—1st, G. B. Carbert; 2nd, Geo. Burn; 3rd, G. J. Lawrie; 4th, Thos. M. Shea.
Ganders, 1907, 4.—1st and 2nd, G. J. Lawrie; 3rd and 4th, A. G. H. Luxton.
Geese, 1907, 4.—1st and 3rd, G. J. Lawrie; 2nd and 4th, A. G. H. Luxton.

African Geese.

Ganders, 7.—1st and 2nd, Miss Mary Colwell; 3rd, Baker Bros.; 4th, C. A. R. Tilt.
Geese, 6.—1st Baker Bros.; 2nd, C. A. R. Tilt; 3rd, Thos. M. Shea; 4th, C. A. R. Tilt.
Ganders, 1907, 4.—1st and 2nd, C. A. R. Tilt; 3rd, Geo. Burn; 4th, A. G. H. Luxton.
Geese, 1907, 5.—1st, Baker Bros.; 2nd, G. J. Lawrie; 3rd, and 4th, C. A. R. Tilt.

A. O. V. Geese.

Ganders, 3.—1st, Geo. Burn.
Geese, 3.—1st, Geo. Burn.
Ganders, 1907, 2.—1st, Geo. Burn.
Geese, 1907, 2.—1st, Geo. Burn.

Aylesbury Ducks.

Drakes, 4.—1st, C. A. R. Tilt; 2nd, G. J. Lawrie.
Ducks, 6.—1st and 3rd, G. & J. Bogue; 2nd, G. J. Lawrie.
Drakes, 1907, 5.—1st and 2nd, G. J. Lawrie; 3rd, H. F. Wismer.
Ducks, 1907, 7.—1st and 2nd, G. & J. Bogue; 3rd, H. F. Wismer.

Rouen Ducks.

Drakes, 6.—1st and 2nd, Baker Bros.; 3rd, Thos. M. Shea.
Ducks, 5.—1st, Baker Bros.; 2nd, Miss Mary Colwell; 3rd, Thos. M. Shea.
Drakes, 1907, 6.—1st, Baker Bros; 2nd, Jas. M McCormack; 3rd, G. & J. Bogue.
Ducks, 1907, 6.—1st, G. J. Lawrie; 2nd, G. & J. Bogue; 3rd, Jas. M. McCormack.

Pekin Ducks.

Drakes, 8.—1st and 2nd, G. J. Lawrie; 3rd, Wm. Collins.
Ducks, 9.—1st, G. J. Lawrie; 2nd, C. A. R. Tilt; 3rd, Thos. M. Shea.
Drakes, 1907, 10.—1st, Baker Bros.; 2nd, Wm. Collins; 3rd, G. J. Lawrie.
Ducks, 1907, 9.—1st, G. J. Lawrie; 2nd, Baker Bros.; 3rd, G. J. Lawrie.

Indian Runner Ducks.

Drakes, 2.—1st and 2nd, T. H. Scott.
Ducks, 2.—1st and 2nd, T. H. Scott.
Drakes, 1907, 2.—1st and 2nd, T. H. Scott.
Ducks, 1907, 1.—1st, T. H. Scott.

CAYUGA DUCKS.

Drakes, 2.—1st, Isaac T. Knight; 2nd, G. & J. Bogue.
Ducks, 2.—1st, Isaac T. Knight, 2nd, G. & J. Bogue.
Drakes, 1907, 2.—1st, G. & J. Bogue; 2nd, Isaac T. Knight.
Ducks, 1907, 2.—1st, G. & J. Bogue; 2nd, Isaac T. Knight

MUSCOVY DUCKS.

Drakes, 2.—1st, Geo. Burn; 2nd, Baker Bros.
Ducks, 2.—1st, Geo. Burn; 2nd, Isaac T. Knight.
Drakes, 1907, 2.—1st, Isaac T. Knight; 2nd, Geo. Burn.
Ducks, 1907, 2.—1st, Geo. Burn; 2nd, Isaac T. Knight.

A. O. V. DUCKS.

Drakes, 5.—1st, H. Karn; 2nd, H. B. Donovan; 3rd, Geo. Burn.
Ducks, 5.—1st, Geo. Burn; 2nd, H. Karn; 3rd, A. G. H. Luxton.
Drakes, 1907, 6.—1st and 3rd, H. Karn; 2nd, H. B. Donovan.
Ducks, 1907, 5.—1st, H. B. Donovan; 2nd, Geo. Burn; 3rd, H. Karn.

ENGLISH PHEASANTS.

Pair, 2.—1st, and 2nd, Forrest City Pheasantry.

GOLDEN PHEASANTS.

Pair, 2. 1st and 2nd, Forrest City Pheasantry.

SILVER PHEASANTS.

Pair, 1.—1st, Forrest City Pheasantry.

A. O. V. PHEASANTS.

Pair, 1.—1st, Forrest City Pheasantry.

GUINEA FOWL.

Pair, 1.—1st, Jas. Baptie.

PIGEONS.

BLACK CARRIER.

Cocks, 3.—1st and 2nd, E. Lemon.
Hens, 3.—1st and 3rd, E. Lemon; 2nd, W. J. Teale.

DUN CARRIER.

Cocks, 2.—1st and 2nd, E. Lemon.
Hens, 4.—1st and 2nd, E. Lemon.

A. O. S. C. CARRIER

Cocks, 3.—1st, E. Lemon; 2nd, Douglas Mitchell.
Hens, 3.—1st and 2nd, E. Lemon.

WHITE POUTER.

Cocks, 4.—1st and 2nd, J. H. Magill.
Hens, 4.—1st, J. H. Magill; 2nd, W. T. Hodgins.

BLUE PIED POUTER.

Cocks, 2.—1st and 2nd, J. H. Magill.
Hens, 2.—1st and 2nd, J. H. Magill.

BLACK PIED POUTER.

Cocks, 3.—1st, J. H. Magill; 2nd, J. & T. Hatton.
Hens, 4.—1st, J. H. Magill; 2nd, J. & T. Hatton.

YELLOW OR RED POUTER.

Cocks, 6.—1st, J. H. Magill, 2nd, Chas. Currier.
Hens, 5.—1st, Chas. Currier; 2nd, J. H. Magill.

PIGMY POUTER.

Cocks, 7.—1st, J. V. McAree; 2nd, A. & T. Readwin.
Hens, 5.—1st, Chas. Currier; 2nd, Robt. R. Cook.

MUFFED TUMBLER.

Cocks, 10.—1st, J. & T. Hatton; 2nd, A. & T. Readwin
Hens, 9.—1st. J. & T. Hatton; 2nd, D. J. Vrooman.

L. F. CLEAN LEG TUMBLER.

Cocks, 11.—1st, F. A. Woodward; 2nd, D. J. Vrooman.
Hens, 12.—1st, J. V. McAree; 2nd, Bert Sheward.

S. F. ALMOND TUMBLER.

Cocks, 8.—1st and 2nd, Jos. A. Worthy.
Hens, 7.—1st, Joseph A. Worthy; 2nd, D. J. Vrooman.

S. F., A. O. C. TUMBLER.

Cocks, 9.—1st and 2nd, Jos. A. Worthy.
Hens, 9.—1st, D. J. Vrooman; 2nd, J. & T. Hatton

RED BARB.

Cocks, 3.—1st, E. Lemon; 2nd, A. & T. Readwin.
Hens, 2.—1st, E. Lemon.

BLACK BARB.

Cocks, 5.—1st, L. Ridler; 2nd, E. Lemon.
Hens, 4.—1st, E. Lemon; 2nd L. Ridler.

A. O. S. C. BARB.

Hens, 1.—2nd, J. & T. Hatton.

WHITE TRUMPETER.

Cocks, 2.—1st, L. Ridler.
Hens, 3.—1st, L. Ridler.

BLACK JACOBIN.

Cocks, 6.—1st and 2nd, J. V. McAree.
Hens, 6.—1st and 2nd, A. W Barton.

RED OR YELLOW JACOBIN.

Cocks, 6.—1st and 2nd, A. W. Barton.
Hens, 6.—1st, A. W. Barton; 2nd, R. K. Barker.

WHITE JACOBINS.

Cocks, 6.—1st, A. W. Barton; 2nd, R. K. Barker.
Hens, 8.—1st and 2nd, R. K. Barker.

A. O. S. C. JACOBINS.

Cocks, 5.—1st, J. & T. Hatton; 2nd, A. W. Barton.
Hens, 4.—1st and 2nd, A. W. Barton.

ORIENTAL FRILLS.

Cocks, 7.—1st, Wm. G. Cocks; 2nd, J. V. McAree.
Hens, 7.—1st, Chas. Currier; 2nd, J. V. McAree.

WHITE FANTAILS.

Cocks, 10.—1st, J. V. McAree; 2nd, Clarence Alliston.
Hens, 12.—1st, G. D. Trimble; 2nd, J. V. McAree.

BLUE OR BLACK FANTAIL.

Cocks, 9.—1st, Hiawatha Pigeon Lofts; 2nd, Douglas Mitchell.
Hens, 6.—1st, Hiawatha Pigeon Lofts; 2nd, Douglas Mitchell.

A. O. S. C. FANTAIL.

Cocks, 7.—1st, A. & T. Readwin; 2nd, W. T. Hodgins.
Hens, 6.—1st, W. T. Hodgins; 2nd, A. & T. Readwin.

RED OR YELLOW MAGPIE.

Cocks, 8.—1st, L. Ridler; 2nd, Hiawatha Pigeon Lofts.
Hens, 10.—1st, L. Ridler; 2nd, R. E. McKinstry.

A. O. C. MAOPIE.

Cocks, 10.—1st, R. E. McKinstry; 2nd, J. V. McAree.
Hens, 10.—1st, J. V. McAree; 2nd, R. E. McKinstry.

BLUE OR BLACK CHEQUERED SHOW HOMER

Cocks, 5.—1st, Alfred Knight.
Hens, 7.—1st and 2nd, Alfred Knight.

A. O. C. SNOW HOMER.

Cocks, 7.—1st and 2nd, Alfred Knight.
Hens, 5.—1st and 2nd, Alfred Knight.

BLACK SWALLOW.

Cocks, 5.—1st, L. Ridler; 2nd, A. & T. Readwin.
Hens, 5.—1st and 2nd, A. & T. Readwin.

ANY OTHER SOLID COLOR SWALLOW.

Cocks, 5.—1st and 2nd, L. Ridler.
Hens, 5.—1st and 2nd, L. Ridler.

A. O. C. SWALLOW.

Cocks, 4.—1st and 2nd, L. Ridler.
Hens, 3.—1st and 2nd, L. Ridler.

DRAGOON.

Cocks, 3.—1st and 2nd, L. Ridler.
Hens, 3.—1st and 2nd, L. Ridler.

ARCHANGEL.

Cocks, 9.—1st, D. J. Vrooman; 2nd, A. & T. Readwin.
Hens, 10.—1st and 2nd, D. J. Vrooman.

NUN.

Cocks, 7.—1st, L. Ridler; 2nd, D. J. Vrooman.
Hens, 7.—1st, and 2nd, J. H. Magill.

AFRICAN BLUE OR SILVER OWL.

Cocks, 4.—1st and 2nd, F. A. Woodward.
Hens, 2.—1st and 2nd, F. A. Woodward.

AFRICAN A. O. C. OWL.

Cocks, 4.—1st and 2nd, F. A. Woodward.
Hens, 4.—1st, F. A. Woodward; 2nd, A. Robinson.

ENGLISH BLUE OR SILVER OWL.

Cocks, 4.—1st, Hiawatha Pigeon Lofts; 2nd, Doidge and McNeil.
Hens, 2.—1st, Doidge & McNeil.

ENGLISH A. O. C. OWL.

Cocks, 1.—1st, A. & T. Readwin.
Hens, 1.—1st, Chas. Currier.

A. O. V. OWLS.

Cocks, 7.—1st, F. A. Woodward; 2nd, J. & T. Hatton.
Hens, 6.—1st, F. A. Woodward; 2nd, J. & T. Hatton.

BLACK TURBIT.

Cocks, 8.—1st, Bert Sheward; 2nd, A. & T. Readwin.
Hens, 9.—1st and 2nd, Bert Sheward.

A. O. C. TURBIT.

Cocks, 5.—1st, Bert Sheward; 2nd, Wm. G. Cocks.
Hens, 7.—1st, Bert Sheward; 2nd, Wm. G .Cocks.

A. O. S. VARIETY PIGEONS.

Cocks, 5.—1st and 2nd, J. & T. Hatton.
Hens, 5.—1st, A. & T. Readwin; 2nd, J. & T. Hatton.

MISCELLANEOUS.

ABYSSINIAN CAVIES.

Pair, 2.—1st and 2nd, Wm. Fox.

PERUVIAN CAVIES

Pair, 2.—1st and 2nd, Wm. Fox.

SMOOTH COATED CAVIES.

Pair, 2.—1st and 2nd, Wm. Fox.

DUTCH RABBITS.

Male, 1.—1st, R. R. Fleming.
Female, 2.—1st and 2nd, R. R. Fleming.

BELGIAN HARES.

Male, 2.—1st and 2nd, Wm. Fox.
Female, 2.—1st and 2nd, Wm. Fox.

SCOTCH FANCY CANARIES.

Male, 3.—1st, F. W. Hodgkin; 2nd, G. J. Lawrie.
Female, 4.—1st and 2nd, F. W. Hodgkin.

A. O. V. CANARY.

Male, 8.—1st, G. J. Lawrie; 2nd, E. A. Hewett.
Female, 2.—1st and 2nd, F. W. Hodgkin.

PEN OF UTILITY FOWL.

10.—1st, F. W. Krouse; 2nd, F. A. Andrews; 3rd, Wm. Wilson.

SELLING CLASS.

DORKINGS.

Males, 5.—1st, A. G. H. Luxton; 2nd, Jas. M. McCormack; 3rd, G. & J. Bogue.
Females, 5.—1st, Jas. M. McCormack; 2nd, G. & J. Bogue; 3rd, Geo. Robertson.

PLYMOUTH ROCKS.

Males, 22.—1st, M. R. Hoover; 2nd, A. W. Graham; 3rd, Guy Bell.
Females, 6.—1st, F. W. Krouse; 2nd, Geo. Robertson; 3rd, Wm. C. Wilson.

WYANDOTTES.

Males, 14.—1st, Geo. Robertson; 2nd, Wilber Lemon; 3rd, G. Wilson Grieve.
Females, 11.—1st, W. R. McDonald; 2nd, L. C. Sage; 3rd, Wilber Lemon.

ORPINGTONS.

Males, 12.—1st, F. W. Krouse; 2nd, John A. Barr; 3rd, A. E. Doan.
Females, 11.—1st, F. W. Krouse; 2nd, F. E. Neville; 3rd, A. E. Doan.

MINORCAS.

Males, 8.—1st, 2nd and 3rd, R. L. Wheadon.
Females, 2.—1st, F. W. Krouse.

LEGHORNS.

Males, 13.—1st, F. W. Krouse; 2nd, A. J. Morgan; 3rd, J. R. Laidlaw.
Females, 11.—1st, F. Wales; 2nd, F. W. Krouse; 3rd, A. J. Morgan.

FRENCH, ANY VARIETY.

Males, 3.—1st, G. & J. Bogue; 2nd, Geo. Robertson; 3rd, A. W. Graham.
Females, 2.—1st, G. & J. Bogue; 2nd, Geo. Robertson.

ANY OTHER VARIETY.

Males, 27.—1st, A. W. Graham; 2nd, Wm. McNeil; 3rd, Philpot Bros.
Females, 16.—1st, Wm. McNeil; 2nd, Wm. C. Wilson & Son; 3rd, Geo. C. Lapsley.

DRESSED POULTRY.

Pair Brahmas, 6.—1st, 2nd and 3rd, J. E. Mounce.
Pair Cochins, 3.—1st, 2nd and 3rd, Adam A. Armstrong.
Pair Langshans, 6.—1st, J. E. Mounce; 2nd and 3rd, Adam A. Armstrong.
Pair Rock Cockerels, 19.—1st, J. E. Mounce; 2nd, Scanlon Bros.; 3rd, Adam A. Armstrong.
Pair Rock Pullets, 16.—1st and 3rd, J. E. Mounce; 2nd, Adam A. Armstrong.
Pair Wyandotte Cockerels, 10.—1st and 2nd, J. E. Mounce; 3rd, Scanlon Bros.
Pair Wyandotte Pullets, 9.—1st, R. Johnson; 2nd and 3rd, Adam A. Armstrong
Pair Minorcas or Andalusians, 4.—1st, J. E. Mounce; 2nd and 3rd, Adam A Armstrong.
Pair Leghorns, 10.—1st, Adam A. Armstrong; 2nd and 3rd, J. E. Mounce.
Pair Dorkings, 5.—1st, J. E. Mounce; 2nd, Adam A. Armstrong; 3rd, A. G. H. Luxton.
Pair Houdans, LaFleche, Creve Coeurs, Any Variety, 4.—1st, 2nd and 3rd, Adam A. Armstrong.
Pair Game, 5.—1st, 2nd and 3rd, Adam A. Armstrong.
Pair Javas, 1.—1st, Scanlon Bros.
Pair Hamburgs, 5.—1st, 2nd and 3rd, Adam A. Armstrong.
Pair Orpington Cockerels, 14.—1st and 2nd, J. E. Mounce; 3rd, E. Fraleigh.
Pair Orpington Pullets, 8.—1st, J. E. Mounce; 2nd, John A. Barr; 3rd, Scanlon Bros.
Best Pair in Class 236, 5.—1st, J. E. Mounce
Turkey, any age, Male, 5.—1st and 2nd, Woodrow & Sons; 3rd, Mrs. Jos. Miles.
Turkey, any age, Female, 4.—1st and 2nd, Woodrow & Sons; 3rd, Scanlon Bros.
Pair Turkeys of 1907, Male, 4.—1st, 2nd and 3rd, Woodrow & Sons.
Pair Turkeys of 1907, Female, 5.—1st, Mrs. Jos. Miles; 2nd and 3rd, Woodrow & Sons
Best Entry in Class 237, 3.—1st, Woodrow & Sons.
Pair White Geese, 6.—1st and 2nd, Scanlon Bros.; 3rd, J. E. Mounce.
Pair Colored Geese, 8.—1st and 2nd, Scanlon Bros.; 3rd, J. E. Mounce.
Best Entry in Class 238, 4.—1st, Scanlon Bros.
Pair White Ducks, 4.—1st, Isaac T. Knight; 2nd, Woodrow & Sons; 3rd, Mrs. Jos. Miles.
Pair Colored Ducks, 10.—1st and 3rd, Matt Wilson; 2nd, Woodrow & Sons.
Best Entry in Class 239, 3.—1st, Matt Wilson.

Six Brahmas, Cochins or Langshans, 5.—1st, J. E. Mounce; 2nd and 3rd, A. Armstrong.

Six Rocks or Wyandottes, 7.—1st, J. E. Mounce; 2nd, Adam A. Armstrong; 3rd, Scanlon Bros.

Six Minorcas, Andalusians or Javas, 3.—1st, Adam A. Armstrong.

Six Dorkings, Houdans, LaFleche, Creve Coeurs or Orpingtons, 13.—1st, J. E. Mounce; 2nd, E. Fraleigh; 3rd, John A. Barr.

Six Games, 2.—1st, Adam A. Armstrong; 2nd, Oswald Barber.

Six Leghorns or Hamburgs, 7.—1st. J. E. Mounce; 2nd, Adam A. Armstrong; 3rd, Scanlon Bros.

Six Turkeys, Young, 4.—1st, 2nd and 3rd, Woodrow & Sons.

Six Geese, 6.—1st, Scanlon Bros.; 2nd, Woodrow & Sons; 3rd, J. E. Mounce.

Six Ducks, 5.—1st, Isaac T. Knight; 2nd and 3rd, Woodrow & Sons.

One Dozen White Eggs, Heaviest and Best, 4.—1st, F. W. Krouse; 2nd, A. G. H. Luxton; 3rd, Chas. Gould.

One Dozen Brown Eggs, Heaviest and Best, 4.—1st and 2nd, F. W. Krouse; 3rd, Woodrow and Sons.

Six Squabs, 4.—1st, W. J. Teale; 2nd and 3rd, A. & T. Readwin.

POULTRY SPECIALS.

Light Brahmas.—Best Hen, H. W. Partlo; Best Cock or Cockerel, H. W. Partlo; Best Collection, H. W. Partlo; Best Cock, Hen, Cockerel and Pullet, H. W. Partlo; Best 3 Cockerels and 3 Pullets, H. W. Partlo.

Dark Brahmas.—Best two Cocks and two Hens, L. C. Sage; Best Cock or Cockerel, L. C. Sage; Best Hen or Pullet, L. C. Sage; Best Cock, Hen, Cockerel and Pullet, L. C. Sage.

Buff Cochins.—Best Cock, Holmhurst Poultry Yards; Best Cockerel, Hugh Wyatt; Best Cock and Hen, Holmhurst Poultry Yards; Best Collection, Hugh Wyatt.

Partridge Cochins.—Best Cock, Wm. C. Wilson & Sons; Best Hen, Richard Oke; Best Cockerel, Richard Oke; Best Pullet, Richard Oke; Best Collection, Richard Oke.

Black Cochins.—Best Hen, W. B. Nantel; Best Cockerel, A. J. George; Best Pullet, W. B. Nantel; Best Cockerel and Pullet, W. B. Nantel.

White Cochins.—Best Cock or Cockerel, W. B. Nantel; Best Hen or Pullet, W. B. Nantel; Best Collection, W. B. Nantel.

Cochins.—Best Shaped Male, Hugh Wyatt.

Black Langshans.—Best Male, R. McCurdy; Best Female, Jno. Burgess; Best Collection, R. McCurdy.

White Langshans.—Best Cock, Philpot Bros.; Best Hen, Philpot Bros.; Best Cockerel, Philpot Bros.; Best Pullet, W. J. Teale; Largest Collection, W. J. Teale.

Langshans.—Best Male, R. McCurdy.

Barred Plymouth Rocks.—1st prize cock, I. K. Millard & Son; 2nd prize cock, F. W. Krouse; 3rd prize cock, I. K. Millard & Son; 1st prize hen, Newton Cosh; 2nd prize hen, I. K. Millard & Son; 3rd prize hen, Newton Cosh; 1st prize cockerel, John Pringle; 2nd, I. K. Millard & Son; 3rd, I. K. Millard & Son; 1st prize pullet, John Pringle; 2nd and 3rd, Newton Cosh; Best cockerel, John Pringle; Best six cockerels, I. K. Millard; Best Pullet, John Pringle; Best Cock, Hen, Cockerel and Pullet, I. K. Millard.

White Plymouth Rocks.—Best Cock, F. A. Andrews; Best Hen, Geo A. Robertson; Best Cockerel, John L. Brown; Best Pullet, John L. Brown; Best three Pullets, John L. Brown; Best Cock and Hen, F. A. Andrews; Best four Cockerels and four Pullets, F. A. Andrews; Best two Cocks, two Hens, two Cockerels and two Pullets, F. A. Andrews; Best Cock, Hen, Cockerel and Pullet, F. A. Andrews; Best Collection, F. A. Andrews.

Plymouth Rocks.—Best Shaped Male, I. K. Millard.

Buff Plymouth Rocks.—Best Colored Pullet, John Bawden; Best two Hens, J. A. Harron; Best Cock, Hen, Cockerel and Pullet, John Bawden; Best Collection, John Bawden; Best Cockerel shown by exhibitor, who has not exhibited at this Show since 1902, Chas. H. Eames; Best Cock, Hen, Cockerel and Pullet, shown by member of the American Buff Plymouth Rock Club, John Bawden.

Golden Laced Wyandottes.—Best Cock, Wm. Daniel; Best Hen, Christian Poultry Farm; Best Cockerel, J. H. Magill; Best Pullet, John Macpherson; Best Collection, J. H. Magill.

Silver Laced Wyandottes.—Best Cock, Christian Poultry Farm; Best Hen, Hintonburg Poultry Yards; Best Cockerel, Jas. Baptie; Best Pullet, Hintonburg Poultry Yards; Best Cock and Pullet, Hintonburg Poultry Yards; Best Male, Jas. Baptie; Best Collection, Hintonburg Poultry Yards.

Black Wyandottes.—Best Cock, J. R. Smith; Best Hen, J. R. Smith; Best two Cockerels, J. R. Smith; Best Pullet, J. R. Smith; Best Cock and Cockerel, J. R. Smith;

Best Colored Cock, J. R. Smith; Best Colored Hen, J. R. Smith; Best Colored Cockerel, J. R. Smith; Best Colored Pullet, J. R. Smith.

Buff Wyandottes.—Best Male, A. W. Graham; Best Female, Jas. Dundas; Best Cock, A. W. Graham; Second Best Cock, Spry & Mick; Best Hen, Rev. R. A. Spencer; 2nd Best Hen, Clarence Allison; Best Collection, Spry & Mick. Cockerel, best Shape and Color, Spry & Mick; Pullet, best Shape and Color, Wm. Moebus & Son; Best Cockerel exhibited by member who has never before shown at this exhibition, Rev. R. A. Spencer; Best Pullet exhibited by member who has never before shown at this exhibition, Rev. R. A. Spencer.

Silver Pencilled Wyandottes.—Best Cock, J. M. Thorpe; Best Hen, J. M. Thorpe; Best Cockerel, J. M. Thorpe; Best Pullet, J. M. Thorpe.

White Wyandottes.—Best Cock, John S. Martin; Best Hen, John S. Martin; Best Cock and Hen, John S. Martin; Best Cockerel, John S. Martin; Best Pullet, John S. Martin; Best Cockerel and Pullet, John S. Martin; Best Collection, John S. Martin; Best Cock, Hen, Cockerel and Pullet, shown by exhibitor who has not won a first prize in this variety at this Exhibition since 1902, Geo. Brierly; Best Headed Male, W. Dawson; Best Headed Female, John S. Martin; Best Shaped Male, John S. Martin; Best Shaped Female, John S. Martin.

Partridge Wyandottes.—Best three Cocks, L. C. Sage; 2nd Best Cock, L. C. Sage; 2nd Best Hen, J. E. Fidler; Best Collection, J. E. Fidler.

Columbian Wyandottes.—Best Hen, T. H. Scott; Best Pullet, W. Dawson; Best Cock, Hen, Cockerel and Pullet, T. H. Scott; Best Collection, T. H. Scott.

Wyandottes.—Best Shaped Male, John S. Martin.

Dominiques.—Best Bird, G. B. Carbert; Best Cock, Hen, Cockerel and Pullet, G. B. Carbert; Best Collection, G. B. Carbert.

Black Javas.—Best Cock, G. & J. Bogue; Best Hen, G. & J. Bogue; Best Cockerel, Richard Oke; Best Pullet; G. & J. Bogue; Best Cockerel and Pullet, Richard Oke.

Mottled Javas.—Best Cock and Hen, G. & J. Bogue; Best Cockerel and Pullet, Richard Oke; Best Collection, G. & J. Bogue.

S. C. Rhode Island Reds.—Best Cock, Emil Wankel & Son; Best Hen, Emil Wankel & Son; Best Cockerel, Emil Wankle & Son; Best Pullet, Emil Wankel & Son; Best Collection,, Emil Wankel & Son.

R. C. Rhode Island Reds.—Best Cockerel and Pullet, Hughes & Burns; Best Collection, Emil Wankel & Son; Rhode Island Reds, Best Shaped Male, Hughes & Burns; Best Colored Male, Hughes & Burns; Best Colored Female, Hughes & Burns; Best Cockerel and Pullet, Hughes & Burns; Best Collection, Emil Wankel & Son.

Black Red Game.—Best Cock, John W. Roberts; Best Hen, John W. Roberts; Best Cockerel, John W. Roberts; Best Pullet, John W. Roberts.

Brown Red Games.—Best Male, Telfer Bros.; Best Female, W. Barber; Best Colletion, Telfer Bros.

Duckwing Games.—Best Male, W. Barber; Best Female, W. Barber; Best Collection, W. Barber.

Pyle Games.—Best Male, Thos. Sherlock; Best Female, Thos. Sherlock; Best Cockerel and Pullet, Telfer Bros.; Best Cock, Hen, Cockerel and Pullet, Thos. Sherlock.

White Indian Games.—Best Hen, Liddon Bros.

Games, Any Variety.—Best Hen, Nixon Bros.; Best Cockerel, Geo. Robertson; Best Pullet, Nixon Bros.; Best Cock, Hen, Cockerel and Pullet, Nixon Bros.

Black Sumatra Games.—Best two Cocks, Frank Shaw; Best Male, Frank Shaw; Best Female, C. J. Daniels.

Pit Game.—Best Cock, Wm. Pearson; Best Male, R. H. Barber; Best Female, Wm. Pearson.

R. C. White Leghorns.—Best Hen, M. R. Hoover; Best two Cockerels, W. J. Bell; Best Colored Male, W. J. Bell; Best Shaped Male, A. J. Morgan; Best Colored Female, W. J. Bell; Best Shaped Female, M. R. Hoover.

S. C. White Leghorns.—Best Hen, Dr. R. C. Coats; Best Pullet, Jas. L. McCormack; Best two Pullets, Jas. L. McCormack; Best Colored Male, Jas. L. McCormack; Best Shaped Male, Jas. L. McCormack; Best Colored Female, Jas. L. McCormack; Best Shaped Female; Jas. L. McCormack; Best Collection of not less than six birds, Jas. L. McCormack; Best Cockerel, Jas. L. McCormack; Best Cock and Cockerel, Jas. L. McCormack; Best Male, Jas. L. McCormack; Best Headed Cock, Jas. L. McCormack; Best Headed Cockerel, Wm. Ferguson.

Black Leghorns.—Best Hen, A. C. Doan; Best Colored Male, A. C. Doan; Best Shaped Male, A. C. Doan; Best Colored Female, A. C. Doan; Best Shaped Female, A. C. Doan; Best Collection of not less than six birds, A. C. Doan; Best Male, F. W. Hodgkin; Best Female, A. C. Doan; Best Colored Cock, F. W. Hodgkin; Best Collection, A. C. Doan.

R. C. Brown Leghorns.—Best Cock, W. C. Wilson & Sons; Best Hen, Wm. Cadman; Best Cockerel, Wm. Cadman; Best Pullet, T. J. Conley; Best three Hens, Wm. Cadman; Best three Cockerels, Wm. Cadman; Best three old birds, Wm. Cadman; Best

three young birds, Wm. Cadman; Exhibitor winning most first prizes, Wm. Cadman; Best Collection of not less than six birds, Wm. Cadman.

S. C. Brown Leghorns.—Best Cock, John Bradley; Best Hen, W. A. Gurney; Cockerel with best hackle and saddle, John Bradley; Four best Laced Cockerels, shown by an exhibitor who has not won a first prize since 1902, Orr & Creedon; Best four Cockerels, H. F. Becker; Best Pullet, W. A. Gurney; Best two Cocks, two Hens, two Cockerels and two Pullets, G. G. Henderson; Best colored Male, John Bradley; Best Shaped Male, John Bradley; Best Colored Female, W. A. Gurney; Best Shaped Female, W. A. Gurney; Best Collection of not less than six birds, W. A. Gurney.

Buff Leghorns.—Best Cock, N. K. Cornwall; Best Hen, J. A. Harron; Best Cockerel, N. K. Cornwall; Best Colored Male, N. K. Cornwall; Best Shaped Male, N. K. Cornwall; Best Colored Female, N. K. Cornwall; Best Shaped Female, N. K. Cornwall; Best collection of not less than six birds, N. K. Cornwall; Best two Cockerels, N. K. Cornwall; Best Pullet, Rev. John D. Ellis.

Leghorns.—Best Cock, Hen, Cockerel and Pullet, Jas. L. McCormack; Best Cockerel and Pullet, Jas. L. McCormack; Best Shaped Male, John Bradley; Exhibit scoring most points in White or Brown Leghorns, Wm. Cadman; Best Pair Old R. C. White Leghorns. Richard Oke; Best Pair Old R. C. Brown Leghorns. Wm Cadman; Best Pair Old S. C. White Leghorns, Dr. R. C. Coates; Best Pair Old S. C. Brown Leghorns, W. A. Gurney; Best Pair Old S. C. Buff Leghorns, N. K. Cornwall; Best Pair Old S. C. Black, A. C. Doan; Best Pair Young R. C. White, W. J. Bell; Best Pair, Young, R. C. Brown, Wm. Cadman; Best Pair S. C. White, Jas. L. McCormack; Best Pair, Young, S. C. Brown, W. A. Gurney; Best Pair young, S. C. Buff, N. K. Cornwall; Best Pair, Young, S. C. Black. A. C. Doan.

Spanish.—Best Cockerel and Pullet, J. H. Warrington; Best Male, J. H. Warrington; Best Collection, J. H. Warrington.

S. C. Black Minorcas.— Best Collection. Henry Dunne; Best two Hens, shown by exhibitor who has not won a prize at this Show since 1902, R. L. Wheadon; Best two Cockerels, shown by an exhibitor who has not won a prize at this Show since 1902, R. L. Wheadon; Best two Pullets, shown by an exhibitor who has not won a prize at this Show since 1902, R. L. Wheadon; Best Cock, Hen, Cockerel and Pullet, J. H. Minshall.

R. C. Black Minorcas.— Best Young Pair, T. A. Faulds; Best Collection, J. H. Minshall; Best Cock, Hen, Cockerel and Pullet, J. H. Minshall.

White Minorcas.—Best Collection, A. C. Moyer.

Andalusians.—Best Cock, H. V. Cosh; Best Hen, H. V. Cosh; Best Cockerel, H. V. Cosh; Best Pullet, Chas. Garvett.

Silver Gray Dorkings.—Best Cock, F. W. Krouse; Best Hen, F. W. Krouse; Best Cockerel, Jas. M. McCormack; Best Pullet, Jas. M. McCormack.

Colored Dorkings.—Best Collection, G. & J. Bogue.

White Dorkings.—Best Hen, J. H. Warrington; Best Collection, J. H. Warrington, Best Collection by oldest Exhibitor, J. H. Warrington.

Dorkings.—Best Male, F. W. Krouse; Best Collection, G. & J. Bogue.

Buff Orpingtons.—Best Cock, A. W. E. Hellyer; Best Hen, Robert Barnes; Best Male, A. W. E. Hellyer; Best Female, Robert Barnes; Best Pullet, Robert Barnes; Best Cockerel and Pullet in Selling Class, P. E. Aird; Best Cockerel, H. A. Hoffman; Best Cock, Hen, Cockerel and Pullet, A. W. E. Hellyer.

S. C. Buff Orpingtons.—Best Cockerel, H. A. Hoffman; Best three Cockerels, A. W. E. Hellyer; Best Cockerel and Pullet, A. W. E. Hellyer.

Black Orpingtons.—Best Cock, Kemp and Waterman; Best Hen, H. Fraleigh; Best Cockerel, Kemp & Waterman; Best Pullet, H. Fraleigh; Best Male, Kemp and Waterman; Best Female; H. Fraleigh; Best four Cockerels, Kemp & Waterman; Best three Cockerels, bred and owned by Exhibitor, E. A. Rawlings; Best four Pullets, Kemp & Waterman.

Orpingtons.—Best Shaped Male, A. W. E. Hellyer; Best Collection of Buffs and Blacks, Robert Barnes.

Houdans.—Best Cock and Hen, G. & J. Bogue; Best two Cockerels and three Pullets, Meadowbrook Farm; Best Collection, G. & J. Bogue.

Creve Coeurs.—Best Cock and Hen, G. & J. Bogue; Best Cockerel and Pullet, Richard Oke.

LaFleche.—Best Cock and Hen, G. & J. Bogue; Best Cockerel and Pullet, Richard Oke.

W. C. B. Polands.—Best Old Pair, Wm. McNeil; Best two Cocks and two Hens, Wm. McNeil; Best two Cockerels and two Pullets, Wm. McNeil; Best Cock, Hen, Cockerel and Pullet, Wm. McNeil; Best Collection, Wm. McNeil.

Golden Polands.—Best Cock, Hen, Cockerel and Pullet, Wm. McNeil.

Silver Polands.—Best Cock, Hen, Cockerel and Pullet, Wm. McNeil.

White Polands.—Best Cock, Hen, Cockerel and Pullet, Wm. McNeil.

Golden Bearded Polands.—Best Cock, Hen, Cockerel and Pullet, G. & J. Bogue.

Silver Bearded Polands.—Best Cock, Hen, Cockerel and Pullet, Wm. McNeil.

White Bearded Polands.—Best Cock, Hen, Cockerel and Pullet, Wm. McNeil.

Polands.—Best Collection, Wm. McNeil.

Buff Laced Polands.—Best Cock, Hen, Cockerel and Pullet, Wm. McNeil.

Golden Spangled Hamburgs.—Best Cock or Cockerel, G. & J. Bogue; Best Hen and Pullet, Jas. Baptie; Best Cock, Hen, Cockerel and Pullet, G. & J. Bogue.

Silver Spangled Hamburgs.—Best Collection, Richard Oke; Best Cock, Hen and Pullet, Jas. Baptie.

Golden Pencilled Hamburgs.—Best Collection, Richard Oke.

Silver Pencilled Hamburgs.—Best Cock or Cockerel, Richard Oke; Best Cock, Hen, Cockerel and Pullet, Richard Oke.

Black Hamburgs.—Best Cockerel, Richard Oke; Best Collection, Richard Oke.

Red Caps.—Best Cock, E. Wells, Jr.; Best Hen, E. Wells, Jr.; Best Cockerel, E. Wells, Jr.; Best Pullet, E. Wells, Jr.; Best Female, E. Wells, Jr.; Best Collection, E. Wells, Jr.

Sultans.—Best Hen, G. & J. Bogue; Best Cockerel and Pullet, G. & J. Bogue.

Silkies.—Best Cock, Teddy Saunders; Best Hen, H. B. Donovan; Best Cockerel, H. B. Donovan; Best Pullet, Teddy Saunders; Best Collection by youngest Exhibitor in this Class, Teddy Saunders; Best Collection, Teddy Saunders.

A. O. V. Fowls.—Best Collection, Wm. McNeil.

Black Red Game Bantams.—Best Cock, Rook Bros.; Best Hen, W. R. Walker; Best Cockerel, Chas. R. Crowe; Best Pullet, Chas. R. Crowe; Best Colored Male, Rook Bros.; Best Colored Female, W R. Walker; Best two Females, shown by Exhibitor who has not won a prize in this variety at this Show since 1902, W. R. Walker.

Brawn Red Game Bantams.—Best four Hens, Tyson & McMaster; Best three Pullets, Tyson & McMaster; Best Colored Male, W. Barber; Best Colored Female, W. R. Walker.

Duckwing Game Bantams.—Best Cock, Spiers Bros.; Best Hen, Tyson & McMaster; Best Cockerel, Thos. Sherlock; Best Pullet, Spiers Bros.; Best Colored Male, W. Barber; Best Colored Female, Tyson & McMaster.

Pyle Game Bantams.—Best six Hens, Tyson & McMaster; Largest Collection, Tyson & McMaster; Best Colored Male, Thos. Bower; Best Colored Female, Tyson & McMaster.

Birchen Game Bantams.—Best Cock, H. B. Donovan; Best Hen, H. B. Donovan. Best Cockerel, Rook Bros.; Best Pullet, Tyson & McMaster.

A. O. V. Game Bantams.—Best Wheaten Female, W. R. Walker.

Game Bantams.—Best Shaped Male, Rook Bros.; Best Shaped Female, Tyson & McMaster; Best Cockerel or Pullet, any Color, Chas. R. Crowe.

G. Sebright Bantams.—Best Cock, Richard Oke; Best Hen, Richard Oke; Best Cockerel, G. & J. Bogue; Best Pullet, Richard Oke; Best Collection, Richard Oke; Best Colored Male, Richard Oke; Best Colored Female, Richard Oke.

S. Sebright Bantams.—Best Cock, T. J. Kiley; Best Hen, Richard Oke; Best Cockerel, Richard Oke; Best Pullet, T J. Kiley; Best Colored Male, T. J. Kiley; Best Colored Female, Richard Oke; Best Collection, Richard Oke

Sebright Bantams.—Best Shaped Male, T. J. Kiley; Best Shaped Female, Richard Oke.

Black Rose Comb Bantams.—Best Cock or Cockerel, Richard Oke; Best Cock, Hen, Cockerel and Pullet, R. L. Wheadon; Best Collection, R. L. Wheadon; Largest entry made by exhibitor, who has not shown this variety at this Show since 1902, R. L. Wheadon.

White Rose Comb Bantams.—Best Cock and Hen, J. T. Isbell; Best Cockerel and Pullet, Richard Oke.

White Cochin Bantams.—Best Male, Doidge & McNeil, Best Female, Doidge & McNeil; Best Collection, Doidge & McNeil.

Buff Cochin Bantams.—Best Cock and Hen, Rosser Bros.; Best Cockerel and Pullet, Robert Barnes.

Black Cochin Bantams.—Best Cock, H. Fraleigh; Best Colored Cock, Doidge & McNeil; Best Hen, W. J. Slessor; Best Colored Hen, H. Fraleigh; Best Cockerel, H. Fraleigh; Best Colored Cockerel, H. Fraleigh; Best Pullet, H. Fraleigh; Best Colored Pullet, H. Fraleigh; Best Cock, Hen, Cockerel and Pullet, H. Fraleigh.

Partridge Cochin Bantams.—Best Cock, Wm. Cadman; Best Hen, Wm. Cadman; Best Cockerel, L. A. Brill; Best Pullet, L. A. Brill; Best Colored Male, Wm. Cadman; Best Colored Female, Wm. Cadman; Best Cock, Hen, Cockerel and Pullet, Wm. Cadman; Best Collection, Wm. Cadman.

Cochin Bantams.—Best Shaped Male, Doidge & McNeil; Best Shaped Female, W. J. Slessor.

White Booted Bantams.—Best Collection, W. J. Teale.

S. F. White Booted Bantams.—Best Cock, T. J. Kiley; Best Hen, W. J. Teale; Best Cockerel, W. J. Teale; Best Pullet, W. J. Teale.

Japanese Black Tailed Bantams.—Best Male, Richard Oke; Best Female, Richard Oke; Best Collection, Richard Oke.

White Japanese Bantams.—Best Cock, Richard Oke; Best Hen, Richard Oke; Best Collection, Richard Oke.

Black Japanese Bantams.— Best Male, Richard Oke; Best Hen and Pullet, H. B. Donovan.

Polish Bearded Bantams.—Best Collection, J. T. Isbel.

Polish Unbearded Bantams.—Best Collection, H. B. Donovan.

Brahma Bantams.—Best Collection, Robt. T. Dickie.

A. O. V. Bantams.—Best Collection, W. E. Raymo.

Light Brahma Bantams.—Best Cock, Robt. T. Dickie; Best Pullet, Robt. T. Dickie.

Rose Comb Bantams.—Best Shaped Male, Richard Oke; Best Shaped Female, J. T. Isbell.

Black Rose Comb Bantams.—Best Colored Male, R. L. Wheadon; Best Colored Female, R. L. Wheadon.

Bronze Turkeys.—Best Male, W. J. Bell; Best Female, W. J. Bell; Best four Hens, W. J. Bell; Best Shaped Male, W. J. Bell; Best Collection, W. J. Bell.

White Turkeys.—Best Male Baker Bros.; Best Female, Miss Mary Colwell; Best Collection, Baker Bros.

Toulouse Geese.—Best Collection, Miss Mary Colwell.

Embden Geese.—Best Collection, Miss Mary Colwell.

A. O. V. Geese.—Best Collection, G. J. Lawrie.

Rouen Ducks.—Best Drake, Old, Baker Bros.; Best Drake, Young, Baker Bros.

Pekin Ducks.—Best Drake, Old, G. J. Lawrie; Best Drake, Young, Baker Bros.

Aylesbury Ducks.—Best Drake, Old, C. A. R. Tilt; Best Drake, Young, G. J. Lawrie.

Cayuga Ducks.—Best Drake, Old, Isaac T. Knight; Best Drake Young, G. & J. Bogue.

A. O. V. Ducks.—Best Drake, Old, T. H. Scott; Best Drake, Young, Isaac T. Knight.

Toulouse Geese.—Best Male, Miss Mary Colwell; Best Female, Miss Mary Colwell.

Embden Geese.—Best Male, Baker Bros.; Best Female, Scanlon Bros.; Best Old Pair, C. A. R. Tilt.

African Geese.—Best Collection, C. A. R. Tilt.

A. O. V. Geese.—Best Male, Geo. Burn; Best Female, Geo. Burn.

Aylesbury Ducks.—Best Male, C. A. R. Tilt; Best Female, G. & J. Bogue; Best Four birds, G. J. Lawrie.

Rouen Ducks.—Best Male, Baker Bros.; Best Female, Baker Bros.; Best four birds, Baker Bros.

Pekin Ducks.—Best Male, G. J. Lawrie; Best Female, G. J. Lawrie; Best two young Pairs, G. J. Lawrie.

Indian Runner Ducks.—Best two Old Males, T. H. Scott.

Cayuga Ducks.—Best Male, G. & J. Bogue; Best Female, Isaac T. Knight.

Colored Muscovy Ducks.—Best Old Male, Baker Bros.; Best Young Male, Isaac T. Knight; Best Old Female, Geo. Burn; Best Young Female, Geo. Burn.

White Muscavy Ducks.—Best Old Male, Geo. Burn.

English Pheasants.—Best Collection, Forest City Pheasantry.

Golden Pheasants.—Best Collection, Forest City Pheasantry.

Silver Pheasants.—Best Collection, Forest City Pheasantry.

A. O. V. Pheasant.—Best Pair of Amherst, Forest City Pheasantry.

PIGEONS.

Best Pouter, bred and rung in 1907, J. H. Magill.

Best S. F. Almond Tumbler Cock, Jos. A. Worthy.

Best S. F. Almond Tumbler Hen, Jos. A. Worthy.

Best Collection S. F. Tumblers, Jos. A. Worthy.

Best White Jacobin Cock, A. W. Barton.

Best Young Jacobin, A. W. Barton.

Best Magpie in Show, R. E. McKinstry.

Best Show Homer in Show, Alfred Knight.

Best Silver English Owl, Hiawatha Pigeon Lofts.

Best Cock Pigeon in Show, F. A. Woodward.

Best Hen Pigeon in Show, L. Ridler.

Best Carrier, E. Lemon.

Best Pouter, J. H. Magill.

Best Pigmy Pouter, J. V. McAree.

Best Long Faced Tumbler, J. V. McAree.

Best Short faced Tumbler, Jos. A. Worthy.
Best Barb, L. Ridler.
Best Trumpeter, L. Ridler.
Best Jacobin, A. W. Barton.
Best Jacobin bred, 1907, A. W. Barton.
Best Oriental, Wm. G. Cocks.
Best Fantail, J. V. McAree.
Best Magpie, R. E. McKinstry.
Best Swallow, L. Ridler.
Best Archangel, A. & T. Readwin.
Best African Owl, F. A. Woodward.
Best Turbit Cock, Bert Sheward.
Best bird exhibited by Novice, J. V. McAree.
Best Black Carrier, W. J. Teale.
Best A. O. V. Carrier, Douglas Mitchell.
Best Pigmy Pouter, A. & T. Readwin.
Best A. O. V. Pouter, A. & T. Readwin.
Best M. Tumbler, Solid Color, A. & T. Readwin.
Best Tumbler, L. F. C. L. Solid Color, Bert Sheward.
Best Tumbler, L. F. C. L. Parti Color, F. A. Woodward.
Best Tumbler, S. F., Bert Sheward.
Best Barb, L. Ridler.
Best Trumpter, L. Ridler.
Best Jacobin, White, A. & T. Readwin.
Best Jacobin, A. O. V., Douglas Mitchell.
Best Fantail, White, A. & T. Readwin.
Best Fantail, Blue or Black, Hiawatha Pigeon Lofts.
Best Fantail, A. O. V., A. & T. Readwin.
Best Magpie, Red or Yellow, L. Ridler.
Best Magpie, A. O. V., L. Ridler.
Best Show Homer, L. Ridler.
Best Swallow, R. or Y., L. Ridler.
Best Swallow, A. O. V., L. Ridler.
Best Dragoon, L. Ridler.
Best Archangel, A. & T. Readwin.
Best Nun, L. Ridler.
Best Owl, African, F. A. Woodward.
Best Owl, English, Hiawatha Pigeon Lofts.
Best Owl, A. O. V., F. A. Woodward.
Best Pigeon, A. O. V., A. & T Readwin.
Best Turbit, Black, Bert Sheward.
Best Turbit, A. O. V., Bert Sheward.

Miscellaneous.

Best Collection Cavies, Wm. Fox.
Best Collection Dutch Rabbits, R. R. Fleming.
Best Dutch Rabbit in Show, R. R. Fleming.
Best Collection Belgian Hares, Wm. Fox.
Best Collection Scotch Fancy Canaries, F. W. Hodgkin.
Best Collection A. O. V. Canaries, F. W. Hodgkin.
Best Pen Utility Fowl, F. W. Krouse.
Best Collection Dressed Chickens, J. E. Mounce.
Best Pair Dressed White Leghorns, J. E. Mounce.
Best Cock, Hen Cockerel and Pullet of Market Variety, bred and raised by Exhibitor in County of Wellington, Philpot Bros.
Best four birds in any section of a variety, exhibited by a citizen of Guelph, R. L. Wheadon.
Best Collection of Water Fowl, Baker Bros.
Best four birds, Cock, Hen, Cockerel and Pullet, in Barred Plymouth Rocks, Light Brahmas or Single Comb Brown Leghorns, H. W. Partlo.
Earliest and Largest Entry for the Poultry Department.—1st Richard Oke; 2nd, A. & T. Readwin; 3rd, G. & J. Bogue.

PRIZE WINNERS IN POULTRY DEPARTMENT AT EASTERN ONTARIO LIVE STOCK AND POULTRY SHOW, 1908.

List gives number of entries and awards in each section. For post office address of exhibitors, see page 293.

Light Brahmas.

Cocks, 9.—1st, 2nd and 3rd, H. W. Partlo.
Hens, 9.—1st, 2nd and 3rd, H. W. Partlo.
Cockerels, 6.—1st and 2nd, H. W. Partlo; 3rd, Pritchard Bros.
Pullets, 6.—1st and 2nd, H. W. Partlo; 3rd, C. C. Cornish.

Dark Brahmas.

Cocks, 2.—1st, Jas. Snetsinger; 2nd, W. B. Nantel.
Hens, 2.—1st, Jas. Snetsinger; 2nd, W. B. Nantel.
Cockerels, 2.—1st, Dr. P. A. McIntosh; 2nd, W. B. Nantel.
Pullets, 3.—1st, Dr. P. A. McIntosh; 2nd, Jas. Snetsinger; 3rd, W. B. Nantel.

Buff Cochins.

Cocks, 4.—1st, W. B. Nantel; 2nd, Tooker & Bowey; 3rd, Morley Peaker.
Hens, 4.—1st, W. B. Nantel; 2nd, Morley Peaker; 3rd, Tooker & Bowey.
Cockerels, 1.—1st, W. B. Nantel.
Pullets, 2.—1st, W. B. Nantel; 2nd, Chas. LaRose.

Partridge Cochins.

Cocks, 3.—1st, Richard Oke; 2nd, W. B. Nantel; 3rd, Tooker & Bowey.
Hens, 4.—1st, Richard Oke; 2nd, W. B. Nantel; 3rd, G & J. Bogue.
Cockerels, 3.—1st, W. B. Nantel; 2nd, Tooker & Bowey.
Pullets, 4.—1st, W. B. Nantel; 2nd, G. & J. Bogue; 3rd, Tooker & Bowey.

Black Cochins.

Cocks, 4.—1st, G. & J. Bogue; 2nd, W. H. Reid; 3rd, Chas. LaRose.
Hens, 4.—1st, G. & J. Bogue; 2nd, Chas. LaRose; 3rd, W. H. Reid.
Cockerels, 5.—1st, Tooker & Bowey; 2nd, G. & J. Bogue; 3rd, W. B. Nantel.
Pullets, 5.—1st, G. & J. Bogue; 2nd, Alfred Flawn; 3rd, Tooker & Bowey.

White Cochins.

Cocks, 1.—1st, W. B. Nantel.
Hens, 1.—1st, W. B. Nantel.
Cockerels, 1.—1st, W. B. Nantel.
Pullets, 2.—1st, W. B. Nantel; 2nd, Chas. LaRose.

Langshans.

Cocks, 2.—1st, John Burgess; 2nd, W. H. Reid.
Hens, 4.—1st, John Burgess; 2nd, W. H. Reid; 3rd, Pritchard Bros.
Cockerels, 2.—1st, W. H. Reid; 2nd, P. A. McIntosh.
Pullets, 3.—1st, P. A. McIntosh; 2nd, W. H. Reid; 3rd, John Burgess.

Barred Plymouth Rocks.

Cocks, 14.—1st, John A. Lambertus; 2nd, F. W. Beckstead; 3rd, J. E. Fidler; 4th, Dr. G. W. Alexander.
Hens, 19.—1st, F. A. James; 2nd, Jos. Fortier; 3rd, M. C. Neate; 4th and 5th, F. W. Beekstead.
Cockerels, 19.—1st, Jos. Fortier; 2nd, Dr. G. W. Alexander; 3rd, F. W. Beckstead; 4th and 5th, John A. Lambertus.
Pullets, 22.—1st, W. A. Gurney; 2nd and 4th, F. W. Beckstead, 3rd, Jos. Fortier; 5th, Dr. G. W. Alexander.

White Plymouth Rocks.

Cocks, 8.—1st, Jas. Snetsinger; 2nd and 3rd, Jos Fortier.
Hens, 9.—1st, Geo. Robertson; 2nd, Jos. Fortier; 3rd, Jas. Snetsinger.
Cockerels, 6.—1st, Geo. Robertson; 2nd, Jos. Fortier; 3rd, P. A. McIntosh.
Pullets, 9.—1st and 2nd, Geo. Robertson; 3rd, Jos. Fortier.

BUFF PLYMOUTH ROCKS.

Cocks, 8.—1st and 3rd, Hintonburg Poultry Yards; 2nd, D. Cumming.
Hens, 7.—1st, Geo. Robertson; 2nd, R. E. McKinstry; 3rd, Hintonburg Poultry Yards.
Cockerels, 7.—1st, Jas. Snetsinger; 2nd, La Trappe Agricultural Inst.; 3rd, Hintonburg Poultry Yards.
Pullets, 6.—1st, Geo. Robertson; 2nd, Jas. Snetsinger; 3rd, Hintonburg Poultry Yards.

GOLDEN WYANDOTTES.

Cocks, 8.—1st, Tooker & Bowey; 2nd, Henry Fulford.
Hens, 5.—1st, 2nd and 3rd, J. H. Magill.
Cockerels, 6.—1st, 2nd and 3rd, J. H. Magill.
Pullets, 7.—1st, J. H. Magill; 2nd, Geo. Higman, Sr.; 3rd, J. H. Magill.

SILVER WYANDOTTES.

Cocks, 8.—1st and 3rd, Hintonburg Poultry Yards; 2nd, Wm. Delary.
Hens, 7.—1st, 2nd and 3rd, Hintonburg Poultry Yards.
Cockerels, 10.—1st, Hintonburg Poultry Yards; 2nd, Wm. Delary; 3rd, H. Clark.
Pullets, 7.—1st, 2nd and 3rd, Hintonburg Poultry Yards.

BUFF WYANDOTTES.

Cocks, 7.—1st, Tooker & Bowey; 2nd, Clarence Allison; 3rd, R. E. Blakely.
Hens, 9.—1st, Clarence Allison; 2nd, Jno. Mason; 3rd, R. E. Blakely.
Cockerels, 6.—1st, R. E. Blakely; 2nd, Tooker & Bowey; 3rd, W. H. Reid.
Pullets, 9.—1st, J. Hughes Samuel; 2nd, J. Hughes Samuel; 3rd, Tooker & Bowey.

WHITE WYANDOTTES.

Cocks, 14.—1st, McDougall & Vout; 2nd, Geo. Higman, Sr.; 3rd, Rev. Thos. J. Stiles; 4th, W. Arnold.
Hens, 28.—1st, Geo. Higman, Sr.; 2nd and 3rd, R. J. Hunt; 4th, McDougall & Vout; 5th, Hintonburg Poultry Yards.
Cockerels, 28.—1st and 2nd, G. Lake; 3rd, Geo. Higman, Sr.; 4th, McDougall & Vout; 5th, W. Arnold.
Pullets, 23.—1st and 4th, Geo. Higman, Sr.; 2nd, G. Lake; 3rd and 5th, McDougall and Vout.

PARTRIDGE WYANDOTTES.

Cocks, 7.—1st and 3rd, J. E. Fidler; 2nd, G. M. Matheson.
Hens, 5.—1st, 2nd and 3rd, J. E. Fidler.
Cockerels, 5.—1st and 3rd, J. E. Fidler; 2nd, G. M. Matheson.
Pullets, 5.—1st, J. E. Fidler, 2nd, Geo. Higman, Jr.; 3rd, Henry Fulford.

A. O. V. WYANDOTTES.

Cocks, 4.—1st, Rev. W. N. Scott; 2nd, Tooker & Bowey; 3rd, E. R. Frith.
Hens, 5.—1st, Rev. W. N. Scott; 2nd, McGinnis & Mailhot; 3rd, G. & J. Bogue
Cockerels, 6.—1st, Tooker & Bowey; 2nd, E. R. Frith; 3rd, Jas. Snetsinger.
Pullets, 6.—1st, G. & J. Bogue; 2nd, Jas. Snetsinger; 3rd, Rev. W. N. Scott.

BLACK JAVAS.

Cocks, 3.—1st, Jas. Snetsinger; 2nd, G. & J. Bogue; 3rd, W. H. Reid.
Hens, 3.—1st, G. & J. Bogue; 2nd, Regis Giroux; 3rd, W. H. Reid.
Cockerels, 1.—1st, Regis Giroux.
Pullets, 3.—1st, G. & J. Bogue; 2nd, Regis Giroux; 3rd, Geo. Robertson.

MOTTLED JAVAS.

Cocks, 1.—1st, G. & J. Bogue.
Hens, 1.—1st, G. & J. Bogue.
Cockerels, 1.—1st, G. & J. Bogue.
Pullets, 2.—1st, G. & J. Bogue; 2nd, Geo. Robertson.

RHODE ISLAND REDS.

Cocks, 4.—1st, Jas. Mills; 2nd, La Trappe Agricultural Inst.; 3rd, R. Palen.
Hens, 5.—1st and 2nd, Jas Mills; 3rd, Hintonburg Poultry Yards.
Cockerels, 15.—1st, La Trappe Agricultural Inst.; 2nd and 4th, Jas. Mills; 3rd, Hintonburg Poultry Yards.
Pullets, 16.—1st and 2nd, Jas. Mills; 3rd and 4th, Jas. A. Dalglish.

B. B. Red Game.

Cocks, 1.—1st, W. Barber.
Hens, 4.—1st and 2nd, W. Barber; 3rd, Galt E. Brown.
Cockerels, 2.—1st and 2nd, W. Barber.
Pullets, 2.—1st and 2nd, W. Barber.

Brown Red Game.

Cocks, 1.—1st, W. Barber.
Hens, 3.—1st and 2nd, W. Barber; 3rd, W. H. Reid.
Pullets, 2.—1st and 2nd, W. Barber.

Duckwing Games.

Cocks, 1.—1st, W. Barber.
Hens, 2.—1st and 2nd, W. Barber.
Cockerels, 2.—1st and 2nd, W. Barber.
Pullets, 2.—1st and 2nd, W. Barber.

Pyle Games.

Cocks, 3.—1st and 3rd, W. Barber; 2nd, Dr. P. A. McIntosh.
Hens, 3.—1st and 2nd, W. Barber; 3rd, Dr. P. A. McIntosh.
Cockerels, 2.—1st and 2nd, W. Barber.
Pullets, 3.—1st and 2nd, W. Barber; 3rd, Dr. P. A. McIntosh.

C. Indian Laced Game.

Cocks, 3.—1st, Galt E. Brown; 2nd, Chas. LaRose.
Hens, 6.—1st, W. B. Nantel; 2nd, Chas. LaRose; 3rd, Pritchard Bros.
Cockerels, 4.—1st, Geo. Robertson; 2nd, Pritchard Bros.; 3rd, Chas. LaRose
Pullets, 7.—1st, Geo. Robertson; 2nd and 3rd, Chas. LaRose.

A. O. S. V. or W. Indian Game.

Cocks, 1.—1st, W. H. Reid.
Hens, 1.—2nd, W. H. Reid.
Cockerels, 2.—1st, W. H. Reid; 2nd, J. H. Warrington.
Pullets, 2.—1st, J. H. Warrington; 2nd, W. H. Reid.

Old English or Pit Game.

Cocks, 4.—1st and 3rd, E. H. Benjamin; 2nd, E. R. Frith.
Hens, 4.—1st, 2nd and 3rd, E. H. Benjamin.
Cockerels, 4.—1st and 2nd, E. H. Benjamin; 3rd, E. R. Frith.
Pullets, 4.—1st and 2nd, E. H. Benjamin; 3rd, E. R. Frith.

S. C. White Leghorns.

Cocks, 9.—1st, Donald McKellar; 2nd, W. H. Carlton; 3rd, Herbert Byshe.
Hens, 12.—1st and 3rd, W. H. Carlton; 2nd and 4th, Donald McKellar.
Cockerels, 15.—1st, 2nd, 3rd and 4th, Donald McKellar.
Pullets, 14.—1st and 3rd, Donald McKellar; 2nd and 4th, Herbert Byshe.

S. C. Brown Leghorns.

Cocks, 2.—1st, G. H. A. Collins.
Hens, 6.—1st, McDongall & Vout; 2nd, W. A. Gurney; 3rd, W. H. Reid.
Cockerels, 6.—1st, McDougall & Vout; 2nd, W. A. Gurney; 3rd, Jas. Snetsinger.
Pullets, 8.—1st and 2nd, McDougall & Vout; 3rd, G. H. A. Collins.

S. C. Black Leghorns.

Cocks, 3.—1st, W. M. Osborne; 2nd Henry Fulford; 3rd, J. H. Warrington.
Hens, 6.—1st, Geo. Robertson; 2nd, W. M. Osborne; 3rd, Henry Fulford.
Cockerels, 6.—1st, A. & T. Readwin; 2nd, Geo. Robertson; 3rd, W. M. Osborne.
Pullets, 6.—1st, Geo. Robertson; 2nd and 3rd, W. M. Osborne.

S. C. Buff Leghorns.

Cocks, 2.—1st, D. Cumming.
Hens, 4.—1st, D. Cumming; 2nd, Thos. Flanigan.
Cockerels, 4.—1st, Thos. Flanigan.
Pullets, 7.—1st, Dr. P. A. McIntosh; 2nd, Thos. Flanigan; 3rd, D. Cumming.

R. C. Brown Leghorns.

Hens, 2.—1st, D. Cumming.
Cockerels, 3.—1st, W. H. Reid; 2nd, D. Cumming; 3rd, Chas. LaRoso.
Pullets, 2.—1st, W. H. Reid; 2nd, D. Cumming.

A. O. S. V., R. C. Leghorns.

Cocks, 3.—1st, Chas. LaRose; 2nd, A. & T. Readwin.
Hens, 3.—1st, Geo. Robertson; 2nd, A. & T. Readwin; 3rd, Richard Oke.
Cockerels, 3.—1st, Jas. Snetsinger; 2nd, Geo. Robertson; 3rd, Richard Oke.
Pullets, 4.—1st, Geo. Robertson; 2nd, Richard Oke; 3rd, A. & T. Readwin.

Spanish.

Cocks, 3.—1st, G. & J. Bogue; 2nd, J. H. Warrington; 3rd, Henry Fulford.
Hens, 3.—1st, J. H. Warrington; 2nd, G. & J. Bogue; 3rd, Henry Fulford.
Cockerels, 2.—1st, J. H. Warrington; 2nd, Geo. Robertson.
Pullets, 3.—1st, G. & J. Bogue; 2nd, J. H. Warrington; 3rd, Geo. Robertson.

Andalusians.

Cocks, 2.—1st, Henry Fulford; 2nd, Chas. LaRose.
Hens, 2.—1st, Chas. LaRose; 2nd, Henry Fulford.
Cockerels, 2.—1st, Chas. LaRose; 2nd, Geo. Robertson.
Pullets, 2.—1st, Chas. LaRose; 2nd, Geo. Robertson.

Black Minorcas.

Cocks, 8.—1st, L. V. Zavitz; 2nd, Wm. Ellis; 3rd, E. R. Frith.
Hens, 17.—1st, L. V. Zavitz; 2nd, J. M. Peaker; 3rd, E. R. Frith; 4th, Wm. Ellis; 5th, G. A. McInnis.
Cockerels, 9.—1st and 3rd, L. V. Zavitz; 2nd, Galt E. Brown.
Pullets, 13.—1st, 2nd and 3rd, L. V. Zavitz; 4th, Wm. Dixon.

White Minorcas.

Cocks, 4.—1st and 2nd, J. A. Benson; 3rd, A. C. Moyer.
Hens, 4.—1st, A. C. Moyer; 2nd, W. M. Osborne; 3rd, J. A. Benson.
Cockerels, 3.—1st, J. A. Benson; 2nd, A. C. Moyer; 3rd, W. M. Osborne.
Pullets, 6.—1st, W. M. Osborne; 2nd, A. C. Moyer; 3rd, J. A. Benson.

Buff Orpingtons.

Cocks, 6.—1st, 2nd and 3rd, A. W. E. Hellyer.
Hens, 10.—1st and 2nd, A. W. E. Hellyer; 3rd, P. E. Aird.
Cockerels, 15.—1st, 2nd and 4th, A. W. E. Hellyer; 3rd, McDougall & Yout.
Pullets, 16.—1st, P. E. Aird; 2nd and 3rd, A. W. E. Hellyer; 4th, John S. Peter.

White Orpingtons.

Cocks, 5.—1st, 2nd and 3rd, Jas. J. Logan.
Hens, 6.—1st, 2nd and 3rd, Jas. J. Logan.
Cockerels, 7.—1st and 3rd, Jas. J. Logan; 2nd, W. J. Annand.
Pullets, 9.—1st, T. G. McLaurin; 2nd and 3rd, Jas. J. Logan.

A. O. V. Orpingtons.

Cocks, 3.—1st, Hintonburg Poultry Yards; 2nd, W. H. Snelling; 3rd, Dr. P. A. McIntosh.
Hens, 5.—1st, Hintonburg Poultry Yards; 2nd, W. H. Snelling; 3rd, Dr. P. A. McIntosh.
Cockerels, 3.—1st, Hintonburg Poultry Yards.
Pullets, 5.—1st, Hintonburg Poultry Yards, 3rd, W. H. Snelling.

Silver Grey Dorkings.

Cocks, 2.—1st, W. H. Reid; 2nd, John Bedlow.
Hens, 4.—1st, W. H. Reid; 2nd and 3rd, John Bedlow.
Cockerels, 4.—1st, J. W. Warrington; 2nd, W. H. Reid; 3rd, John Bedlow.
Pullets, 5.—1st, J. H. Warrington; 2nd, W. H. Reid; 3rd, John Bedlow.

COLORED DORKINGS.

Cocks, 2.—1st, G. & J. Bogue; 2nd, J. H. Warrington.
Hens, 3.—1st, J. H. Warrington; 2nd, G. & J. Bogue; 3rd, W. H. Reid.
Cockerels, 2.—1st, G. & J. Bogue; 2nd, J. H. Warrington.
Pullets, 4.—1st and 2nd, Geo. Robertson; 3rd, G. & J. Bogue.

WHITE DORKINGS.

Cocks, 1.—1st, J. H. Warrington.
Hens, 2.—1st and 2nd, J. H. Warrington.
Cockerels, 2.—1st and 2nd, J. H. Warrington.
Pullets, 2.—1st and 2nd, J. H. Warrington.

HOUDANS.

Cocks, 2.—1st, G. & J. Bogue; 2nd, Regis Giroux.
Hens, 4.—1st and 2nd, G. & J. Bogue; 3rd, Wm. Holliday.
Cockerels, 5.—1st, G. & J. Bogue; 2nd, Wm. Holiday; 3rd, McDougall & Vout.
Pullets, 6.—1st, G. & J. Bogue; 2nd, McDougall & Vout; 3rd, G. & J. Bogue.

CREVE COEURS.

Cocks, 1.—1st, J. H. Warrington.
Hens, 2.—1st, J. H. Warrington; 2nd, G. & J. Bogue.
Cockerels, 2.—1st, G. & J. Bogue.
Pullets, 3.—1st, J. H. Warrington; 2nd, G. & J. Bogue.

LAFLECHE.

Cocks, 2.—1st, J. H. Warrington; 2nd, G. & J. Bogue.
Hens, 2.—1st, G. & J. Bogue; 2nd, J. H. Warrington.
Cockerels, 3.—1st, G. & J. Bogue; 2nd, Geo. Robertson.
Pullets, 3.—1st, J. H. Warrington; 2nd, G. & J. Bogue.

FAVEROLLE.

Cocks, 2.—1st, W. B. Nantel.
Hens, 3.—1st, W. B. Nantel; 2nd, Geo. Higman, Sr.; 3rd, Dr. P. A. McIntosh.
Cockerels, 3.—1st and 2nd, Geo. Higman, Sr.; 3rd, W. B. Nantel.
Pullets, 4.—1st, Geo. Higman, Sr.; 2nd, W. B. Nantel; 3rd, Geo. Robertson.

BLACK HAMBURGS.

Cocks, 4.—1st, Richard Oke; 2nd, Jas. Baptie; 3rd, Galt E. Brown.
Hens, 5.—1st, Jas. Baptie; 2nd, Galt E. Brown.
Cockerels, 5.—1st, Richard Oke; 2nd, Jas. Baptie; 3rd, David Stillie.
Pullets, 5.—1st, Jas Baptie; 2nd, David Stillie; 3rd, Galt E. Brown.

G. P. HAMBURGS.

Cocks, 3.—1st, Galt E. Brown; 2nd, David Stillie.
Hens, 3.—1st, Galt E. Brown; 2nd, David Stillie.
Cockerels, 3.—1st, G. & J. Bogue; 2nd, Richard Oke.
Pullets, 6.—1st, G. & J. Bogue; 2nd and 3rd, David Stillie.

S. P. HAMBURGS.

Cocks, 3.—1st, Richard Oke; 2nd, Galt E. Brown.
Hens, 3.—1st, Galt E. Brown.
Cockerels, 2.—1st, Richard Oke.

G. S. HAMBURGS.

Cocks, 3.—1st, Jas. Baptie; 2nd, G. & J. Bogue.
Hens, 6.—1st, 2nd and 3rd, Jas. Baptie.
Cockerels, 3.—1st, G. & J. Bogue; 2nd, Galt E. Brown.
Pullets, 4.—1st, Jas Baptie; 2nd, Galt E. Brown; 3rd, G. & J. Bogue.

S. S. HAMBURGS.

Cocks, 4.—1st and 2nd, Jas. Baptie; 3rd, D. Cumming.
Hens, 5.—1st and 2nd, Jas. Baptie; 3rd, D. Cumming.
Cockerels, 6.—1st, G. R. Leroux; 2nd and 3rd, Jas. Baptie.
Pullets, 7.—1st, 2nd and 3rd, Jas. Baptie.

W. C. B. Polands.

Cocks, 2.—1st, G. & J. Bogue.
Hens, 2.—1st, G. & J. Bogue.
Cockerels, 3.—1st, G. & J. Bogue; 2nd, Galt E. Brown.
Pullets, 3.—1st, G. & J. Bogue; 2nd, Galt E. Brown.

Golden Polands.

Cocks, 4.—1st, Galt E. Brown; 2nd, G. & J. Bogue.
Hens, 4.—1st, G. & J. Bogue; 2nd, Galt E. Brown.
Cockerels, 3.—1st, G. & J. Bogue.
Pullets, 3.—1st, G. & J. Bogue.

Silver Polands.

Cocks, 5.—1st, Galt E. Brown; 2nd, G. & J. Bogue; 3rd, McGinnis & Mailhot.
Hens, 5.—1st, Galt E. Brown; 2nd, G. & J. Bogue; 3rd, McGinnis & Mailhot.
Cockerels, 4.—1st, G. & J. Bogue; 2nd, Wm. McNeil; 3rd, Galt E. Brown.
Pullets, 4.—1st and 3rd, Wm. McNeil; 2nd, G. & J. Bogue.

A. O. S. V. Polands.

Cocks, 2.—1st, J. H. Warrington; 2nd, G. & J. Bogue.
Hens, 2.—1st, G. & J. Bogue.
Cockerels, 3.—1st, G. & J. Bogue; 2nd, Geo. Robertson.
Pullets, 4.—1st, G. & J. Bogue; 2nd, Geo. Robertson; 3rd, J. H. Warrington.

A. O. S. V. Fowl.

Cocks, 4.—1st, E. Saunders; 2nd, J. H. Warrington; 3rd, G. & J. Bogue.
Hens, 4.—1st, E. Saunders; 2nd, G. & J. Bogue; 3rd, Rook Bros.
Cockerels, 3.—1st, E. Saunders; 2nd, G. & J. Bogue; 3rd, J. H. Warrington.
Pullets, 4.—1st, E. Saunders; 2nd, G. & J. Bogue; 3rd, J. H. Warrington.

Black Red Game Bantams.

Cocks, 3.—1st, Rook Bros.; 2nd, McGinnis & Mailhot; 3rd, C. C. Cornish.
Hens, 3.—1st, Rook Bros.; 2nd, McGinnis & Mailhot; 3rd, C. C. Cornish.
Cockerels, 4.—1st and 2nd, Rook Bros.; 3rd, McGinnis & Mailhot.
Pullets, 3.—1st and 2nd, Rook Bros.; 3rd, McGinnis & Mailhot.

Brown Red Game Bantams.

Cocks, 2.—1st and 2nd, W. Barber.
Hens, 2.—1st and 2nd, W. Barber.
Cockerels, 2.—1st and 2nd, W. Barber.
Pullets, 2.—1st and 2nd, W. Barber.

Duckwing Game Bantams.

Cocks, 3.—1st, W. Barber; 2nd, Rook Bros.; 3rd, W. H. Reid.
Hens, 4.—1st, Rook Bros.; 2nd and 3rd, W. Barber.
Cockerels, 4.—1st, Rook Bros.; 2nd, W. Barber, 3rd, W. H. Reid.
Pullets, 4.—1st and 2nd, Rook Bros.; 3rd, W. Barber.

Pyle Game Bantams.

Cocks, 3.—1st and 2nd, W. Barber; 3rd, W. H. Reid.
Hens, 4.—1st and 3rd, W. Barber; 2nd, W. H. Reid.
Cockerels, 5.—1st and 3rd, R. E. McKinstry; 2nd, W. Barber.
Pullets, 5.—1st, R. E. McKinstry; 2nd, G. R. Leroux; 3rd, W. Barber.

A. O. V. Game Bantams.

Cocks, 3.—1st, H. B. Donovan; 2nd, Rook Bros.; 3rd, Doidge & McNeil.
Hens, 4.—1st, H. B. Donovan; 2nd, Rook Bros.; 3rd, Doidge & McNeil.
Cockerels, 3.—1st, Rook Bros.; 2nd, Doidge & McNeil; 3rd, H. B. Donovan
Pullets, 4.—1st, Rook Bros.; 2nd, H. B. Donovan; 3rd, W. Barber.

G. Sebright Bantams.

Cocks, 4.—1st, G. & J. Bogue; 2nd, W. H. Reid; 3rd, LaTrappe Agricultural Institute.
Hens, 6.—1st, G. & J. Bogue; 2nd, L. A. Brill; 3rd, W. H. Reid.
Cockerels, 4.—1st, G. & J. Bogue; 2nd, W. H. Reid; 3rd, L. A. Brill.
Pullets, 5.—1st, G. & J. Bogue; 2nd, W. H. Reid; 3rd, L. A. Brill.

S. Sebright Bantams.

Cocks, 5.—1st, W. J. Slessor; 2nd, McGinnis & Mailhot; 3rd, W. H. Reid.
Hens, 4.—1st, W. J. Slessor; 2nd, McGinnis & Mailhot; 3rd, G. A. McInnis.
Cockerels, 6.—1st, L. V. Zavitz; 2nd, G. & J. Bogue; 3rd, W. J. Slessor.
Pullets, 5.—1st, G. & J. Bogue; 2nd, L. V. Zavitz; 3rd, W. J. Slessor.

R. C. B. Bantams.

Cocks, 6.—1st, W. J. Slessor; 2nd, L. A. Brill; 3rd, W. H. Reid.
Hens, 6.—1st, W. J. Slessor; 2nd, W. H. Reid; 3rd, L. A. Brill.
Cockerels, 6.—1st, W. J. Slessor; 2nd, L. A. Brill; 3rd, W. H. Reid.
Pullets, 6.—1st, H. B. Donovan; 2nd, L. A. Brill; 3rd, W. H. Reid.

Buff Cochin Bantams.

Cocks, 3.—1st, Doidge & McNeil; 2nd, W. Plant; 3rd, C. C. Cornish.
Hens, 3.—1st, Doidge & McNeil; 2nd, W. Plant; 3rd, C. C. Cornish.
Cockerels, 3.—1st, F. M. Briggs; 2nd, Doidge & McNeil; 3rd, C. C. Cornish.
Pullets, 5.—1st, F. M. Briggs; 2nd, W. Plant; 3rd, C. C. Cornish.

White Cochin Bantams.

Cocks, 2.—1st and 2nd, Doidge & McNeil.
Hens, 2.—1st and 2nd, Doidge & McNeil.
Cockerels, 3.—1st and 2nd, Doidge & McNeil; 3rd, F. M. Briggs.
Pullets, 3.—1st and 3rd, Doidge & McNeil; 2nd, F. M. Briggs.

Partridge Cochin Bantams.

Cocks, 3.—1st, G. & J. Bogue; 2nd, L. A. Brill; 3rd, H. B. Donovan.
Hens, 3.—1st, G. & J. Bogue; 2nd, L. A. Brill; 3rd, H. B. Donovan.
Cockerels, 3.—1st, G. & J. Bogue; 2nd, H. B. Donovan.
Pullets, 4.—1st, G. & J. Bogue; 2nd, L. A. Brill; 3rd, H. B. Donovan.

A. O. V. Cochin Bantams.

Cocks, 6.—1st and 3rd, Doidge & McNeil; 2nd, W. J. Slessor.
Hens, 6.—1st, W. J. Slessor; 2nd, Doidge & McNeil; 3rd, F. M. Briggs.
Cockerels, 5.—1st and 3rd, W. J. Slessor; 2nd, F. M. Briggs.
Pullets, 5.—1st, W. J. Slessor; 2nd, Doidge & McNeil; 3rd, F. M. Briggs.

Japanese Bantams.

Cocks, 4.—1st, G. A. McInnis; 2nd, H. B. Donovan.
Hens, 5.—1st, G. A. McInnis; 2nd, W. H. Reid; 3rd, H. B. Donovan.
Cockerels, 4.—1st, H. B. Donovan; 2nd, W. H. Reid.
Pullets, 5.—1st, G. A. McInnis; 2nd, H. B. Donovan; 3rd, W. H. Reid.

A. O. S. V. Bantams.

Cocks, 5.—1st, H. B. Donovan; 2nd, W. H. Reid; 3rd, W. H. Reid.
Hens, 4.—1st, H. B. Donovan; 2nd, W. H. Reid.
Cockerels, 7.—1st, L. A. Brill; 2nd, W. H. Reid; 3rd, G. & J. Bogue.
Pullets, 7.—1st, G. & J. Bogue; 2nd, Richard Oke; 3rd, W. H. Reid.

Bronze Turkeys.

Cocks, 3.—1st, D. Cumming; 2nd and 3rd, A. Thompson.
Hens, 3.—1st, D. Cumming; 2nd and 3rd; A. Thompson.
Cockerels, 4.—1st, A. Thompson; 2nd, P. D. Sinclair; 3rd, D. Cumming.
Pullets, 4.—1st and 2nd, A. Thompson; 3rd, D. Cumming.

White Turkeys.

Cocks, 2.—1st, A. Thompson; 2nd, D. Cumming.
Hens, 1.—1st, A. Thompson.
Cockerels, 1.—1st, A. Thompson
Pullets, 3.—1st and 3rd, A. Thompson; 2nd, D. Cumming.

A. O. S. V. Turkeys.

Cocks, 2.—1st and 2nd, A. Thompson
Hens, 2.—1st and 2nd, A. Thompson.
Cockerels, 3.—1st, D. Cumming; 2nd and 3rd, A. Thompson.
Pullets, 3.—1st, D. Cumming; 2nd and 3rd, A. Thompson.

Toulouse Geese.

Gander, Old, 5.—1st and 3rd, A. Thompson; 2nd, D. Cumming.
Geese, Old, 5.—1st and 2nd, A. Thompson; 3rd, P. D. Sinclair.
Gander, Young, 5.—1st and 2nd, A. Thompson; 3rd, D. Cumming.
Geese, Young, 5.—1st and 2nd, A. Thompson; 3rd, R. Reid & Co.

Embden Geese.

Gander, Old, 2.—1st and 2nd, A. Thompson.
Goose, Old, 2.—1st and 2nd, A. Thompson.
Gander, Young, 3.—1st and 2nd, A. Thompson; 3rd, D. Cumming.
Geese, Young, 2.—1st and 2nd, A. Thompson.

Chinese Geese.

Ganders, Old, 1.—1st, A. Thompson.
Geese, Old, 2.—1st and 2nd, A. Thompson.
Gander, Young, 1.—1st, A. Thompson.
Geese, Young, 1.—1st, A. Thompson.

A. O. V. Geese.

Ganders, Old, 2.—1st and 2nd, A. Thompson.
Geese, Old, 2.—1st and 2nd, A. Thompson.
Ganders, Young, 1.—1st, A. Thompson.
Geese, Young, 1.—1st, A. Thompson.

Rouen Ducks.

Drake, Old, 2.—1st, W. H. Reid; 2nd, A. Thompson.
Ducks, Old, 4.—1st, G. & J. Bogue; 2nd, W. H. Reid; 3rd, A. Thompson.
Drakes, Young, 4.—1st, G. & J. Bogue; 2nd, A. Thompson; 3rd, D. Cumming.
Ducks, Young, 6.— 1st and 2nd, G. & J. Bogue; 3rd, McInnis & Mailhot.

Pekin Ducks.

Drakes, Old, 7.—1st, Jas. Snetsinger; 2nd, P. D. Sinclair; 3rd, John Bedlow.
Ducks, Old, 9.—1st, Jas. Snetsinger; 2nd, W. H. Reid; 3rd, D. Cumming.
Drakes, Young, 10.—1st, Jas. Snetsinger; 2nd, A. Thompson; 3rd, Geo. Robertson.
Ducks, Young, 9.—1st and 3rd, Jas. Snetsinger; 2nd, A. Thompson.

Aylesbury Ducks.

Drakes, Old, 2.—1st, A. Thompson; 2nd, W. H. Reid.
Ducks, Old, 4.—1st and 2nd, G. & J. Bogue; 3rd, W. H. Reid.
Drakes, Young, 1.—1st, A. Thompson.
Ducks, Young, 4.—1st and 2nd, G. & J. Bogue; 3rd, W. H. Reid.

Cayuga Ducks.

Drakes, Old, 2.—1st, G. & J. Bogue; 2nd, A. Thompson.
Ducks, Old, 3.—1st and 2nd, G. & J. Bogue.
Drakes, Young, 4.—1st and 2nd, Geo. Robertson; 3rd, G. & J. Bogue.
Ducks, Young, 5.—1st and 2nd, G. & J. Bogue; 3rd, Geo. Robertson.

Indian Runner Ducks.

Drakes, Old, 1.—1st, A. Thompson.
Ducks, Old, 1.—1st, A. Thompson.
Drakes, Young, 2.—1st, A. Thompson; 2nd, Geo. Robertson.
Ducks, Young, 2.—1st, A. Thompson; 2nd, Geo. Robertson.

A. O. V. Ducks.

Drakes, Old 2.—1st and 2nd, A. Thompson.
Ducks, Old, 2.—1st and 2nd, A. Thompson.
Drakes, Young, 1.—1st, A. Thompson.
Ducks, Young, 1.—1st, A. Thompson.

PIGEONS.

Carriers.

Cock, 1.—1st, W. H. Reid.
Hens, 2.—1st, Capital Pigeon Lofts; 2nd, W. H. Reid.

White Pouter.

Cocks, 1.—1st, J. H. Magill.
Hens, 2.—1st, J. H. Magill; 2nd, W. H. Reid.

A. O. C. Pouter.

Cocks, 3.—1st and 2nd; J. H. Magill.
Hens, 3.—1st and 2nd, J. H. Magill.

Pigmy Pouter.

Cocks, 3.—1st and 2nd, W. H. Reid.
Hens, 3.—1st and 2nd, W. H. Reid.

L. F. Muffed Tumblers.

Cocks, 4.—1st, Capital Pigeon Lofts; 2nd, W. H. Reid.
Hens, 4.—1st, A. & T. Readwin; 2nd, Capital Pigeon Lofts.

L. F. Clean Leg Tumblers.

Cocks, 6.—1st, Capital Pigeon Lofts; 2nd, Hiawatha Pigeon Lofts.
Hens, 6.—1st, Capital Pigeon Lofts; 2nd, W. H. Reid.

S. F. Tumblers.

Cocks, 4.—1st and 2nd, W. G. Cocks.
Hens, 4.—1st and 2nd, W. G. Cocks.

Any Color Barb.

Cocks, 1.—1st, Capital Pigeon Lofts.
Hens, 1.—1st, Capital Pigeon Lofts.

Trumpeter.

Cocks, 2.—1st and 2nd, W. H. Reid.
Hens, 2.—1st and 2nd, W. H. Reid.

R. or Y. Jacobins.

Cocks, 3.—1st and 2nd, W. H. Reid.
Hens, 3.—1st and 2nd, W. H. Reid.

White Jacobins.

Cocks, 4.—1st and 2nd, W. H. Reid.
Hens, 4.—1st and 2nd, W. H. Reid.

A. O. S. C. Jacobins.

Cocks, 3.—1st and 2nd, W. H. Reid.
Hens, 3.—1st and 2nd, W. H. Reid.

R. C. Antwerp.

Cocks, 2.—1st and 2nd, W. H. Reid.
Hens, 1.—1st, W. H. Reid.

Silver Dun Antwerps.

Cocks, 1.—1st, W. H. Reid.
Hens, 1.—1st, W. H. Reid.

White Fantails.

Cocks, 4.—1st, A. & T. Readwin; 2nd, Hiawatha Pigeon Lofts.
Hens, 5.—1st, Hiawatha Pigeon Lofts; 2nd, A. & T. Readwin.

Blue Fantails.

Cocks, 2.—1st, W. H. Reid; 2nd, A. & T. Readwin.
Hens, 2.—1st, W. H. Reid; 2nd, A. & T. Readwin.

A. O. S. C. Fantails.

Cocks, 4.—1st, W. H. Reid; 2nd, Hiawatha Pigeon Lofts.
Hens, 3.—1st, Hiawatha Pigeon Lofts; 2nd, Capital Pigeon Lofts.

Black Magpies.

Cocks, 4.—1st and 2nd, R. E. McKinstry.
Hens, 4.—1st and 2nd, R. E. McKinstry.

Red Magpies.

Cocks, 4.—1st, W. H. Reid; 2nd, Hiawatha Pigeon Lofts.
Hens, 4.—1st, Hiawatha Pigeon Lofts; 2nd, W. H. Reid.

A. O. C. Magpies.

Cocks, 2.—1st, R. E. McKinstry; 2nd, E. R. Frith.
Hens, 2.—1st, R. E. McKinstry; 2nd, E. R. Frith.

Show Homer.

Cocks, 3.—1st, W. H. Reid; 2nd, Capital Pigeon Lofts.
Hens, 3.—1st, W. H. Reid; 2nd, Capital Pigeon Lofts.

Blue Flying Homer.

Cocks, 4.—1st, R. E. Blakely; 2nd, LaTrappe Agricultural Institute.
Hens, 4.—1st, W. H. Reid; 2nd, LaTrappe Agricultural Institute.

A. O. C. Flying Homer.

Cocks, 6.—1st, John A. Belford; 2nd, C. C. Cornish.
Hens, 6.—1st, C. C. Cornish; 2nd, John A. Belford.

Black Swallow.

Cocks, 3.—1st and 2nd, W. H. Reid.
Hens, 3.—1st, W. H. Reid; 2nd, A. & T. Readwin.

A. O. S. C. Swallows.

Cocks, 3.—1st, Capital Pigeon Lofts; 2nd, W. H. Reid.
Hens, 2.—1st and 2nd, W. H. Reid.

A. O. C. Swallows.

Cocks, 2.—1st and 2nd, W. H. Reid.
Hens, 3.—1st, W. H. Reid; 2nd, W. Plant.

Dragoons.

Cocks, 2.—1st, Capital Pigeon Lofts; 2nd, W. H. Reid
Hens, 2.—1st, Capital Pigeon Lofts; 2nd, W. H. Reid.

Archangels.

Cocks, 4.—1st and 2nd, A. & T. Readwin.
Hens, 4.—1st and 2nd, A. & T. Readwin.

Black Nun.

Cocks, 1.—1st, A. & T. Readwin.
Hens, 1.—1st, W. Plant.

A. O. C. Nuns.

Cocks, 2.—1st, Capital Pigeon Lofts; 2nd, W. H. Reid.

White African Owls.

Cocks, 3.—1st, Wm. G. Cocks; 2nd, A. & T. Readwin.
Hens, 4.—1st, Wm. G. Cocks; 2nd, W. H. Reid.

A. O. C. African Owls.

Cocks, 2.—1st, W. H. Reid; 2nd, W. G. Cocks.

English Owls, Any Variety.

Cocks, 1.—1st, Hiawatha Pigeon Lofts.

A. O. V. Owls.

Cocks, 1.—1st, A. & T. Readwin.
Hens, 1.—1st, A. & T. Readwin.

Black Turbits.

Cocks, 3.—1st, A. & T. Readwin; 2nd, W. H. Reid.
Hens, 2.—1st, Capital Pigeon Lofts; 2nd, A. & T. Readwin.

Blue Turbits.

Cocks, 3.—1st, W. G. Cocks; 2nd, W. H. Reid.
Hens, 3.—1st, W. H. Reid; 2nd, A. & T. Readwin.

A. O. C. Turbits.

Cocks, 3.—1st, A. & T. Readwin 2nd, W. G. Cocks.
Hens, 1.—1st, A. & T. Readwin.

Ice Pigeons.

Cocks, 1.—1st, Capital Pigeon Lofts.
Hens, 1.—1st, Capital Pigeon Lofts.

A. O. S. Variety.

Cocks, 5.—1st and 2nd, A. & T. Readwin.
Hens, 5.—1st, W. G. Cocks; 2nd, A. & T. Readwin.

Belgian Hares, over 6 months.

Males, 2.—1st, McGinnis & Mailhot; 2nd, Geo. Robertson.
Females, 2.—1st, McGinnis & Mailhot; 2nd, Geo. Robertson.

Belgian Hares, under 6 months.

Males, 2.—1st, McGinnis & Mailhot; 2nd, Geo. Robertson.
Females, 2.—1st, McGinnis & Mailhot; 2nd, Geo. Robertson.

SELLING CLASS.

Dorkings.

Males, 5.—1st, W. H. Reid; 2nd, G. & J. Bogue; 3rd, Geo. Robertson.
Females, 6.—1st, Geo. Robertson; 2nd and 3rd, J. H. Warrington.

Brahmas.

Males, 4.—1st, G. T. Guy; 2nd, C. C. Cornish; 3rd, Pritchard Bros.
Females, 2.—1st, Pritchard Bros.; 2nd, G. T. Guy.

Plymouth Rocks.

Males, 20.—1st, M. C. Neate; 2nd and 3rd, Herbert Byshe.
Females, 6.—1st, Robert Palen; 2nd, Geo. Robertson, 3rd, Robt. Palen.

WYANDOTTES.

Males, 19.—1st, B. J. Hunt; 2nd and 3rd, G. Lake.
Females, 12.—1st and 2nd, G. Lake; 3rd, Geo. Robertson.

ORPINGTONS.

Males, 5.—1st, 2nd and 3rd, W. H. Snelling.
Females, 3.—1st, W. H. Slinn; 2nd, A. W. E. Hellyer; 3rd, D. Cumming.

MINORCAS.

Males, 6.—1st, L. V. Zavitz; 2nd, Hintonburg Poultry Yards; 3rd, Thos. Flanigan.
Females, 10.—1st, E. R. Frith; 2nd. Hintonburg Poultry Yards; 3rd, Wm. Dixon.

LEGHORNS.

Males, 8.—1st and 2nd, Donald McKellar; 3rd, G. W. Francis.
Females, 9.—1st and 2nd, Donald McKellar; 3rd, J. P. Belanger.

FRENCH.

Males, 1.—1st, G. & J. Bogue.
Females, 3.—1st, G. & J. Bogue; 2nd, J. H. Warrington; 3rd, Geo. Robertson.

DRESSED POULTRY.

Pair Javas, Langshans or Rhode Island Reds, of 1907, Any Variety, 4.—1st, W. H. Slinn; 2nd and 3rd, Scanlon Bros.; 4th, Jos. Tomalin.
Pair Plymouth Rocks, 1907, Any Variety, 9.—1st and 2nd, Herbert Byshe; 3rd, D. Cumming; 4th, Scanlon Bros.
Pair Wyandottes, 1907, Any Variety, 3.— 1st, Geo. Higman, Sr.; 2nd, Jos. Tomalin; 3rd, Scanlon Bros.

Pair Dorkings, 1907, Any Variety, 1.—1st, D. Cumming.
Pair Orpingtons, 1907, Any Variety, 4.—1st, 2nd and 3rd, W. H. Slinn; 4th, Jos. Tomalin.
Pair Game, 1907, Any Variety, 1.—1st, Jos. Tomalin.
Pair French, 1907, Any Variety, 1.—1st, Jos. Tomalin.
Best Pair Dressed Chickens, 3.—1st, Herbert Byshe.
Turkey, any age, Male, 3.—1st, Jas. Snetsinger; 2nd and 3rd, Jos. Tomalin.
Turkey, any age, Female, 3.—1st and 2nd, Jos. Tomalin; 3rd, Jas. Snetsinger.
Turkey, 1907, Male, 3.—1st and 3rd, Jos. Tomalin; 2nd, Jas Snetsinger.
Turkey, 1907, Female, 4.—1st and 4th, Jos. Tomalin; 2nd, Jas. Snetsinger; 3rd, D. Cumming.
Geese, 1907, White, 3.—1st, A. Thompson; 2nd, Jos. Tomalin; 3rd, Scanlon Bros.
Colored Geese, 1907, 6.—1st and 3rd, Jos. Tomalin; 2nd. A. Thompson; 4th, Scanlon Bros.
Pair White Ducks, 1907, 3.—1st and 2nd, Jos. Tomalin; 3rd, A. Thompson.
Pair Colored Ducks, 1907, 2.—1st and 2nd, Jos. Tomalin.
Dozen White Eggs, 2.—1st, E. R. Frith; 2nd, Jos. Tomalin.
Dozen Colored Eggs, 4.—1st, A. W. E. Hellyer; 2nd, Jos. Tomalin; 3rd, G. Lake; 4th, A. Dynes.
Pair Squabs, 4.—1st and 2nd, A. & T. Readwin; 3rd and 4th, Jos. Tomalin.

POULTRY SPECIALS.

Light Brahmas.—Best Male, H. W. Partlo; Best Cock, Hen, Cockerel and Pullet, H. W. Partlo.
Dark Brahmas.—Best Female, W. B. Nantel.
Buff Cochins.—Best Male, W. B. Nantel.
Cochins.—Best Collection, Any one Variety, W. B. Nantel.
Barred Plymouth Rocks.—Best Cock, John A. Lambertus; Best Cockerel, Jos. Fortier; Best Pullet, W. A. Gurney; Best Female, F. A. James, Best Cock, Hen Cockerel and Pullet, F. W. Beckstead.
White Plymouth Rocks.—Best Male, Geo. Robertson; Best Female, Geo. Robertson; Best Cock, Hen, Cockerel and Pullet, Geo. Robertson.
Buff Plymouth Rocks.—Best Female, Geo. Robertson.
Plymouth Rocks, except Barred.—Best Cock, Hen, Cockerel and Pullet, Geo. Robertson.

Silver Wyandottes.—Best Male, Hintonburg Poultry Yards.
Buff Wyandottes.—Best Cock, Hen, Cockerel and Pullet, Tooker & Bowey.
White Wyandottes.—Best Cock, McDougall & Vout; Best Shaped Cock, McDougall & Vout Best Hen, Geo. Higman, Sr.; Best Shaped Hen, Geo. Higmau, Sr.; Best Pullet, Geo. Higman, Sr.; Best Male, McDougall & Vout; Best Female, Geo. Higman, Sr.; Best Cockerel and Pullet, G. Lake; Best Cock, Hen, Cockerel and Pullet, Geo. Higman, Sr.
Partridge Wyandottes.—Best Cock, Hen, Cockerel and Pullet, J. E. Fidler.
Wyandottes, except White.—Best Cock, Hen, Cockerel and Pullet, Hintonburg Poultry Yards.
Javas.—Best Collection, any one variety, G. & J. Bogue.
Rhode Island Reds.—Best Female, Jas. Mills; Best Cock, Hen, Cockerel and Pullet, Jas. Mills.
B. B. Red Games.—Best Cock, Hen, Cockerel and Pullet, W. Barber.
Brown Red Games.—Best Cock, Hen, Cockerel and Pullet, W. Barber.
Duckwing Games.—Best Cock, Hen, Cockerel and Pullet, W. Barber.
A. O. S. V. or Indian Game.—Best Male, W. H. Reid.
Old English or Pit Game.—Best Male, E. H. Benjamin.
S. C. White Leghorns.—Best Cock and Hen, W. H. Carleton; Best Male, Donald McKellar; Best Female, Donald McKellar; Best Cock, Hen, Cockerel and Pullet, Donald McKellar; Best Collection, Donald McKellar; Best Cockerel, Donald McKellar.
S. C. Black Leghorns.—Best Female, Geo. Robertson.
R. C. Brown Leghorns.—Best Collection, D. Cumming.
Leghorns, except White.—Best Cock, Hen, Cockerel and Pullet, W. M. Osborne.
Spanish.—Best Male, G. & J. Bogue; Best Female, J. H. Warrington.
Black Minorcas.—Best Cock, Hen, Cockerel and Pullet, L. V. Zavitz; Best Male, L. V. Zavitz.
Minorcas.—Best Female, L. V. Zavitz; Best Cock, Hen, Cockerel and Pullet, L. V. Zavitz.
S. C. Buff Orpingtons.—Best Cock, A. W. E. Hellyer; Best Shaped Cockerel, A. W. E. Hellyer.
R. P. Buff Orpingtons.—Best Pullet, P. E. Aird; Best Male, A. W. E. Hellyer; Best Female, A. W. E. Hellyer; Best Cock, Hen, Cockerel and Pullet, A. W. E. Hellyer.
White Orpingtons.—Best Cockerel, J. J. Logan; Best Pullet, T. G. McLaurin; Best Male, J. J. Logan; Best Cock, Hen, Cockerel and Pullet, J. J. Logan.
A. O. V. Orpingtons.—Best Male, Hintonburg Poultry Yards; Best Female, Hintonburg Poultry Yards.
Orpingtons, except Buff.—Best Cock, Hen, Cockerel and Pullet, Hintonburg Poultry Yards.
Silver Grey Dorkings.—Best Cock, Hen, Cockerel and Pullet, W. H. Reid.
White Dorkings.—Best Display, J. H. Warrington.
Houdans.—Best Male, G. & J. Bogue.
French.—Best Display, G. & J. Bogue.
Faverolles.—Best Female, W. B. Nantel.
S. S. Hamburgs.—Best Male, D. Cumming.
Golden Polands.—Best Cock, Hen, Cockerel and Pullet, G. & J. Bogue.
Silver Polands.—Best Male, G. & J. Bogue.
Polands.—Best Collection, G. & J. Bogue.
A. O. S. V. Fowls.—Best Male, G. & J. Bogue.
Game Bantams.—Best Male, W. Barber; Best Female, Rook Bros.
Golden Sebright Bantams.—Best Cockerel and Pullet, G. & J. Bogue.
Silver Sebright Bantams.—Best Male, L. V. Zavtiz.
Cochin Bantams.—Best Male, G. & J. Bogue; Best Female, G. & J. Bogue.
Japanese Bantams.—Best Cock, Hen, Cockerel and Pullet, H. B. Donovan.
Geese.—Best Collection, any variety, A. Thompson.
Ducks.—Best Collection, any variety, A. Thompson.

Pigeons.

Best Pair Magpies any color.—R. E. McKinstry.
Best Silver Dun Homer, Hen.—J. A. Belford.
Best Pair Black Barbs.—Capital Pigeon Lofts.
Best Collection Trumpeters, Jacobins or Dragoons.—W. H. Reid.
Best four Pigeons of any one variety.—R. E. McKinstry.
Best Cock Pigeon in Show.—W. H. Reid.
Best Hen Pigeon in Show.—R. E. McKinstry.

MEMBERS OF DOMINION CATTLE BREEDERS' ASSOCIATION, 1907 AND 1908

Name and Address	Breed
Abbott, Fred., Harrietsville	Holstein-Friesian.
Acherman, A. B., Palmerston	Shorthorns.
Adamson, Edgar, Erindale	Holstein-Friesian.
Agricultural College, Truro, N.S.	Herefords.
Agricultural School, L'Assumption, Que.	Ayrshires.
Agricultural School, St. Annes de Pocitaire, Que.	Ayrshires.
Aitcheson, John, Stratford	Shorthorns.
Akitt, Jos., Inglewood	Shorthorns.
Albright, Nelson, St. Andrews, Que.	Ayrshires.
Allen, Frank, Uxbridge	Shorthorns
Allen, Richard, Flesherton	Shorthorns.
Allin, Samuel & Sons, Bowmanville	Shorthorns.
Allin, Thos. & Sons, Oshawa	Shorthorns.
Alton, A. P. & Son, Appleby	Shorthorns.
Alton, Thos. & Son, Appleby	Shorthorns.
Alton, T. M., Nelson	Shorthorns.
Amos, Geo. & Son, Moffatt	Shorthorns.
Amos, Robert, Guelph	Shorthorns.
Anderson, Robert, North Georgetown, Que.	Ayrshires.
Anderson, D. E., Dungannon	Shorthorns.
Anderson, Geo. W., Mountain View	Holstein-Friesian.
Anderson, Thos., Lyn	Holstein-Friesian.
Anderson, Thos., Mount Forest	Shorthorns.
Anderson, Wm., Lyn	Holstein-Friesian.
Andrew, Geo., Elimville	Shorthorns.
Archambault, Odillow, St. Paul l'Ermite, Que.	Ayrshires.
Archibald, C. A., Truro, N.S.	Ayrshires.
Arkell, Henry & Son, Arkell	Shorthorns.
Armour, Andrew, Dunnville	Shorthorns.
Armour, John, Perth	Shorthorns.
Armstrong, Geo., Speedside	Shorthorns.
Armstrong, Geo. B., Teeswater	Shorthorns.
Armstrong, Jas., Emo	Shorthorns.
Armstrong, Jas., Shawville, Que.	Ayrshires.
Armstrong, John, Wanstead	Shorthorns.
Armstrong, M., Tillsonburg	Holstein-Friesian.
Armstrong, Wm., Avonbank	Shorthorns.
Armstrong, Wm., Locust Hill	Holstein-Friesian.
Armstrong, Major A. K., Danville, Que.	Ayrshires.
Arnold, H. G. & Sons, Maidstone	Shorthorns.
Ash, Wm. R., North Ridge	Shorthorns.
Atkinson, J. A., Dartford	Shorthorns.
Auld, A. F. & G., Eden Mills	Shorthorns.
Auld, Jas., Eden Mills	Shorthorns.
Avery, Albert, Armow	Shorthorns.
Baechler, C., Kinloss	Shorthorns.
Badger, Geo. & Sons, Clarksburg	Shorthorns.
Bailey, W. J., Nober	Holstein-Friesian.
Baird, Chas. Jr., Motherwell	Holstein-Friesian.
Baker, E., Winchester	Shorthorns.
Baker, Thos., Solina	Shorthorns.
Bald, Wm. J., Sebringville	Holstein-Friesian.
Baldwin, Geo. A., Dunnville	Holstein-Friesian.
Bales, O. D, Lansing	Holstein-Friesian.
Ballantyne, W. W., Stratford	Ayrshires.
Ballow, G. W., 402 Produce Exchange, New York.	Ayrshires.
Barber & Aitcheson, Guelph	Galloways.
Barber, Frank, Villa Nova	Holstein-Friesian.
Barber, W. J., Mountain View	Shorthorns.
Barker, W. W., Paris Station	Shorthorns.
Barlow, Judson, Binbrook	Shorthorns.
Barnes, Fred, Birr	Herefords.
Barnes, W. G., Green River	Shorthorns.
Barnett, Jas. W., Brooklin	Shorthorns.
Barnett, Robert, Curries	Holstein-Friesian.
Barr, B. R., Harrietsville	Holstein-Friesian.
Barr, C. E., Vinemount	Shorthorns.
Barr, John, Blyth	Shorthorns.
Barr, J. F., Annan	Shorthorns.
Barrett, T. & Son, Ridgetown	Shorthorns.
Bartlett, D. & Sons, Smithville	Shorthorns.
Barton, John T., Beaton	Shorthorns.
Bass, W. M., Newboro	Ayrshires.
Bassingthwaite, Peter, Richmond Hill	Shorthorns.
Battye, Herbert, Gore Bay	Shorthorns.
Baxter, E., North Georgetown, Que.	Ayrshires.
Bayeroft, H. T., Bond Head	Shorthorns.
Bayliss, Isaac, Clifford	Shorthorns.
Beale, T. R., Athens	Holstein-Friesian.
Dean, Robert, Carlow	Shorthorns.
Beattie, John, Caledonia	Shorthorns.

Beaton, Wm., Coulson.....Shorthorns.
Beatty, John, Varna.....Shorthorns.
Beaudin, P. A., Montreal, Que.....Ayrshires.
Bechtel, Menno, Kossuth.....Shorthorns.
Beck, Ed., Gore Bay.....Shorthorns.
Beckton, John W., Glencoe.....Shorthorns.
Bedgood, Thos. E., McWilliams.....Holstein-Friesian.
Begg, Jas., Box 88, St. Thomas.....Ayrshires.
Begg, Victor, Moose Creek.....Ayrshires.
Begg, W. A., Tiverton.....Shorthorns.
Beggs, David C., Linwood.....Shorthorns.
Bell, Dr. James, Dorchester St., Montreal, Que. Ayrshires.
Bell, Jas & Son, Markdale.....Shorthorns.
Bell, A. E., Farnham Centre, Que.....Ayrshires.
Bell Bros., Bradford.....Shorthorns
Bell, Thos., Glanford.....Shorthorns.
Bell, W. H., Audley.....Shorthorns.
Bell, W. M., Springford.....Shorthorns.
Bell, Wm. V. S, Kars.....Ayrshires.
Bellamy, Geo. C., Toledo.....Holstein-Friesian.
Belyea, D. D., Wyebridge.....Shorthorns.
Bender, F. W., Elmira.....Shorthorns.
Benham, Jas. W. & Son, Rockwood.....Shorthorns.
Benner, W. R. Alvinston.....Shorthorns.
Bennett, L. L., Bennett, Que.....Herefords.
Benning, J., Williamstown.....Ayrshires.
Berger, Fred, St. Theodore d'Acton, Que.....Ayrshires.
Berrigan, Jas., Pembroke.....Shorthorns.
Berscht, John, Chesley.....Shorthorns.
Beig, John B., Amulree.....Shorthorns.
Betterridge, Paul, St. Mary's.....Shorthorns.
Betzner, Eph, Conestogo.....Shorthorns.
Bice, A. & Sons, Clandeboye.....Shorthorns.
Biggins, W. J., Clinton.....Shorthorns.
Bilger, Jacob, Walkerton.....Shorthorns.
Bilger, Moses, Walkerton.....Shorthorns.
Binnette, J. F., St. Anne de Prescott.....Ayrshires.
Bingaman, D. Washington.....Shorthorns.
Bingaman, J. E., Haysville.....Shorthorns.
Bingham, John, Georgetown.....Shorthorns.
Binnie, Jas. Erin.....Aberdeen-Angus.
Bird, Jacob, Elmira.....Shorthorns.
Birdsall, F. & Son, Birdsall.....Shorthorns.
Birkett, Geo., Balsam.....Shorthorns.
Black, D. Allen, Kingston.....Ayrshires.
Black, H. C., Thornton.....Shorthorns.
Black, John H., Allenford.....Shorthorns.
Black, J. J., Winchester.....Shorthorns.
Black, Fred S., Amherst, N.S.....Ayrshires.
Black, Robert, Saurin.....Shorthorns.
Black, N. H., Rockwood.....Shorthorns.
Black, W. W., Amherst, N.S.....Herefords.
Blackney, F. R., S. Qu'Appelle, Sask.....Ayrshires.
Blackburn, W. C., Darlington.....Shorthorns.
Blackwell, T. B., Cannington.....Shorthorns.
Blackie, John, Spring Bay.....Shorthorns.
Blanchard, C. N., Appleby.....Shorthorns.
Blagden, E., Flamboro Centre.....Shorthorns.
Blayney, J. E., Lynnville.....Holstein-Friesian.
Blue, John, Eustis, Que.....Ayrshires.
Blyth, C. & G. W., Marden.....Shorthorns.
Bogart, J. W., Morewood.....Ayrshires.
Bogart, L. F., Gosport.....Shorthorns.
Bollert, H., Cassel.....Holstein-Friesian.
Bone, A., Paris.....Shorthorns.
Bonne, Enfant Joseph, St Paul l'Ermite, Que. Ayrshires.
Bonneycastle, C. E., Campbellford.....Shorthorns.
Booth, E. W., City View.....Shorthorns.
Booth, Jas., Ayton.....Shorthorns.
Bought, Wm., Raglan.....Shorthorns.
Bowes, Jas, Strathnairn.....Shorthorns.
Bowley, Walter W., Napperton.....Ayrshires.
Bowman, James, Guelph.....Aberdeen-Angus.
Bowser, H. E., Delta.....Ayrshires.
Bowyer, C. W., Carholme.....Holstein-Friesian.
Boyd, John, Huntley.....Herefords.
Boyes, Wm. J., Brooklin.....Shorthorns.
Bradwin, E. W., Mount Forest.....Shorthorns
Bragg, W. S., Bowmanville.....Shorthorns.
Brandon, Wm., Napanee.....Shorthorns.
Brandon, J. H. & W. W., Fenelon Falls.....Shorthorns.
Bratt, Geo. A., Inwood.....Shorthorns.
Bray, Jas., Portage la Prairie, Man.....Herefords.
Bray, Samuel, Enfield.....Shorthorns.
Bredner, Robert, Rocklyn.....Shorthorns.
Breen, J. F., Melanchton.....Shorthorns.
Bricker, John C., Elmira.....Shorthorns.
Bricker, J. W., Hawkesville.....Shorthorns.
Brien, Ed., & Son, Ridgetown.....Shorthorns.
Bright, John, Myrtle.....Shorthorns.

MEMBERS OF DOMINION CATTLE BREEDERS' ASSOCIATION, 1907 AND 1908.—*Continued.*

Name and Address	Breed
Bristow, Thos., Stayner	Shorthorns.
Bristow, Geo., B., Rob Roy	Shorthorns.
Brillinger,, J. L & Son, Malcolm	Shorthorns.
Broadfoot, A. & J , Seaforth	Shorthorns.
Broadfoot, T. B., Fergus	Aberdeen-Angus
Brock, R. B., Jarvis	Holstein-Friesian
Brodie, G. A., Bethesda	Shorthorns.
Broom, John, Norval	Shorthorns.
Broomfield, Robert J., Brechin	Shorthorns.
Brote, Harold V., LaRiviere, Man	Herefords.
Broughton, Geo. A., Harriston	Herefords.
Brown, A & Son, Beachburg	Shorthorns.
Brown Bros., Orono	Shorthorns.
Brown, Duncan & Son, Iona	Shorthorns.
Brown, Jas., Norval	Shorthorns.
Brown, Jas., Thorold	Shorthorns.
Brown, Alf., Hemingford, Que	Ayrshires.
Brown, John, Oxford Centre	Holstein-Friesian.
Brown, John, Howick Station, Que	Ayrshires.
Brown, John C., Stamford	Holstein-Friesian
Brown, Jno. S., Seaforth	Shorthorns.
Brown, J. & Son, Galt	Shorthorns.
Brown, Robt., Harley	Shorthorns.
Brown, R. J., Killarney, Man	Herefords.
Brown, W. W., Lyn	Holstein-Friesian.
Brownridge, J. F., Ashgrove	Shorthorns.
Bruce, Jas., Caesarea	Shorthorns.
Bryant, Wm. A., Cairngorm	Holstein-Friesian.
Brydone, Jno., Milverton	Shorthorns.
Bryson, Jas., Brysonville, Que	Ayrshires.
Buchanan, Jno., Elia	Holstein-Friesian.
Buckrell, Jno., Beaconsfield	Holstein-Friesian.
Burchall, B., Fenelon Falls	Shorthorns.
Burch, W. D., Lambeth	Shorthorns.
Burgess, W. D , Cannington	Shorthorns.
Burk, B , Brougham	Shorthorns.
Burnett, Jno., Winterbourne	Shorthorns.
Burnett, A. & Sons, Alma	Shorthorns.
Burnett, W. A., Salem	Shorthorns.
Bull, E. W., Weston	Shorthorns.
Burns, Alex., Rockwood	Shorthorns.
Burns, David, Brooklin	Shorthorns.
Burr, Peter, Bloomfield	Holstein-Friesian.
Burt, D., St. George	Holstein-Friesian.
Burt, J. W., Coningsby	Aberdeen-Angus.
Bustard, Geo., Vickers, Que	Ayrshires.
Butcher, Walt., Erie View	Shorthorns.
Butler, Edwin, Norwich	Holstein-Friesian.
Buttle, H. & B., Stafford	Shorthorns.
Cahoon, E., Harrietsville	Ayrshires.
Caister, E., Tavistock	Shorthorns.
Calder, Alex., Epsom	Shorthorns.
Calder, Chas., M.P.P., Brooklin	Shorthorns.
Calder, Wm. M , Glanford	Shorthorns.
Callander, Jas , North Gower	Ayrshires.
Calvert, R. L., Ilderton	Shorthorns.
Cameron, Colin, Etobicoke	Shorthorns.
Cameron, Jno., Norval	Shorthorns.
Cameron, Jno. A., Oak Lake, Man.	Herefords.
Cameron, Gus, Scotch Hills, N.B.	Ayrshires.
Cameron, Thos., Farquhar	Shorthorns
Campbell, David, Clifford	Shorthorns.
Campbell, J. & J. D., Woodville	Shorthorns.
Campbell, Jas. K., Palmerston	Shorthorns.
Campbell, John, Dalmeny	Ayrshires.
Campbell, Jno., Woodville	Shorthorns.
Campbell, Jno , Harriston	Shorthorns.
Campbell, Jno. R., Dalkeith	Ayrshires.
Campbell, Robt., Roseneath	Holstein-Friesians.
Campbell, R. A , Canyon, Texas, U S.A	Herefords.
Campbell, W. R., Campbellcroft	Shorthorns.
Campsall, Benj , Hartington	Holstein-Friesians.
Canadian Land & Ranch Co., Crane Lake, Sask.	Herefords.
Capithorn, J , Jumping Pond, Alta	Herefords.
Cargill, W. D , Cargill	Shorthorns.
Carlisle, G. F., Newton Brook	Holstein-Friesians.
Carlyle Bros., Morewood	Ayrshires.
Carpenter, W. S , Simcoe	Shorthorns.
Carr, Fred, St. Thomas	Holstein-Friesians.
Carrell, Chas. W., Norwich	Shorthorns.
Carroll, Wm., The Maples	Shorthorns.
Cartwright, F. L , Napanee	Shorthorns.

Caskey, J. A., Madoc ..... Holstein-Friesians.
Case, W. H., Evelyn ..... Shorthorns.
Casey, Jas., Valentia ..... Shorthorns.
Caughell, David, Yarmouth Centre ..... Holstein-Friesians.
Caughell, G. H., Middlemarch ..... Holstein-Friesians.
Cavers, J. P., Ormstown, Que ..... Ayrshires.
Central Experimental Farm, Ottawa ..... Shorthorns, Ayrshires.
Challis, W. J., Thamesville ..... Shorthorns.
Chambers, D. W., Freelton ..... Shorthorns.
Chambers, Edwin C., Fairfield Plains ..... Holstein-Friesians.
Chambers, Jno., Hensall ..... Shorthorns.
Champion, W. L., Reaburn, Man. ..... Ayrshires.
Chapman, J. A., Beresford, Man. ..... Herefords.
Chanters, W. C., Epping ..... Shorthorns.
Chapman, Jno, G., St. Thomas ..... Shorthorns.
Charleon, G., Dunerief ..... Shorthorns.
Charlton, N. G., Brownsville ..... Holstein-Friesians.
Charpentier, Philias, L'Epiphanie, Que ..... Ayrshires.
Charteris, Robt., Egmondville ..... Shorthorns.
Chinniek, J. & E., Chatham ..... Shorthorns.
Chisholm, Jas., Dunlop ..... Shorthorns.
Christie, Gilbert, Aberdour ..... Shorthorns.
Christie, Peter, M. P., Manchester ..... Shorthorns.
Clare, Herbert, Norwich ..... Holstein-Friesians.
Clare, J. H., Chapman ..... Shorthorns.
Clark, Aaron, Aurora ..... Shorthorns.
Clark, Alex., Brinston's Corners ..... Ayrshires.
Clark, Jas. C., Campbellford ..... Ayrshires.
Clark, J. G., Ottawa ..... Ayrshires.
Clark, R. C. & Co, Hammond ..... Ayrshires.
Clark, Wm, Greenwood ..... Shorthorns.
Clark, Wm., Meyersburg ..... Ayrshires.
Clark, W. F., Woodville ..... Shorthorns.
Clarke, Amos, Dundalk ..... Shorthorns.
Clarke, Harry, Schomberg ..... Herefords.
Clarkson, Jno., Summerville ..... Holstein-Friesians.
Clarkson, Wm., Malton ..... Shorthorns.
Clarkson, Wm., Aurora ..... Herefords.
Claus, W. W., Vineland ..... Shorthorns.
Clayton, Geo., Peepabun ..... Shorthorns.
Cleghorn, Jas., Guelph ..... Shorthorns.
Cleghorn, J. W., Mosboro ..... Shorthorns.
Cleland, Arch., Hemingford, Que ..... Ayrshires.
Clemons, G. W., St. George ..... Holstein-Friesians.
Clifford, L. O., Oshawa ..... Herefords.

Cline, J. M., Mapleton ..... Holstein-Friesians.
Cline, Jno. W., Boston ..... Holstein-Friesians.
Clink, W. H., Barwick ..... Shorthorns.
Cloutier, Joseph, River Au Chene, Que ..... Ayrshires.
Cloutier, A. P., St. Prosper, Que ..... Ayrshires.
Clute, Justice R. C., Toronto ..... Ayrshires.
Coakwell, Wm., Green River ..... Shorthorns.
Cochrane, Peter, Almonte ..... Shorthorns.
Cochrane, Geo., Enfield ..... Shorthorns.
Cochrane, Wm, Russell ..... Ayrshires.
Cohoe, D. B., New Durham ..... Holstein-Friesians.
Cohoe, D. P., New Durham ..... Holstein-Friesians.
Coffee, Denis, Orillia ..... Shorthorns,
Cohoe, J. W., New Durham ..... Holstein-Friesians.
Cohoon, Emerson, Harrietsville ..... Ayrshires.
Coke, J., Erin ..... Aberdeen-Angus.
Coke, Jas., Sutorville ..... Shorthorns.
Cole, T. J. T., Tyrone ..... Shorthorns.
Colton Bros., Hawkestone ..... Shorthorns.
Comotois, Jos., St. Jean de Matha, Que ..... Ayrshires.
Conn, J. A., Heathcote ..... Shorthorns.
Connell, Jas., Harriston ..... Shorthorns.
Connolly, Jas., Lindsay ..... Shorthorns.
Colquhuon, Peter, Clifford ..... Shorthorns.
Cook, B. G., Ingers ll ..... Holstein-Friesians.
Cook, Jas., Myrtle ..... Shorthorns.
Coon, S. A., Athens ..... Holstein-Friesians.
Cooper, Wm., Emo ..... Shorthorns.
Corbett, W. A., Pontypool ..... Shorthorns.
Corley, Jas., Lindsay ..... Shorthorns.
Corley, J. W., Mt. Forest ..... Shorthorns.
Corley, Richard, Belgrave ..... Shorthorns.
Cormack, Henry A., Arthur ..... Shorthorns.
Corneil, D. H., Onemee ..... Shorthorns.
Cottingham, Jas., Ormstown, Que ..... Ayrshires.
Coulter, David, Goldsmith ..... Shorthorns.
Coulter, Jno, Belgrave ..... Shorthorns.
Coulthardt, R. E, St. Marys ..... Shorthorns.
Coults, Peter, Egerton ..... Shorthorns.
Countryman, G. W., Tweed ..... Holstein-Friesians.
Courtney, Joshua, Schomberg ..... Shorthorns.
Cousins, Jno. & Sons, Harriston ..... Shorthorns.
Couter, Edw., St. Elizabeth, Que ..... Ayrshires.
Coutts, Jas. & Son, Midhurst ..... Shorthorns.
Couture, Francis, St. Augustine, Que ..... Ayrshires.

MEMBERS OF DOMINION CATTLE BREEDERS' ASSOCIATION, 1907 AND 1908.—*Continued.*

Name and Address	Breed
Cowan, Jas., Seaforth	Shorthorns.
Cowan, Jas. & Son, Guelph	Shorthorns.
Coyte, Thos. & Sons, Port Hope	Shorthorns.
Crake, R. H., Bradford	Shorthorns.
Crawford, A. W., Widder	Shorthorns.
Creighton, D. & Sons, St. Marys	Shorthorns.
Crerar, Alex., Lisbon	Shorthorns.
Crerar, Jas. A., Shakespeare	Shorthorns.
Crich, Herb., Seaforth	Shorthorns.
Crockett, T., Danville, Que	Ayrshires.
Cross, Wm., Beaton	Shorthorns.
Crozier, Arch., Beachburg	Shorthorns.
Crozier, J. G. & W. J., Puce	Shorthorns.
Cullis, Edw., Vandeleur	Shorthorns.
Cullis & Lean, Powles Corners	Shorthorns.
Cumberland, Barlow, Port Hope	Ayrshires.
Cumming, A. J., Heckston	Ayrshires.
Cumming, D., Russell	Ayrshires.
Cumming, Donald, Lancaster	Ayrshires.
Cunningham, Walter N., Blyth	Shorthorns.
Cunningham, W. J., Egbert	Shorthorns.
Currie, Daniel, Black's Corner	Shorthorns.
Currie, Daniel, Lammermoor	Shorthorns.
Currie, Jno., Eramosa	Shorthorns.
Currie, L. D., Ospringe	Shorthorns.
Currie, Robt., Oakdale	Shorthorns.
Curtis, D. H., Northwood	Shorthorns.
Cuthbert, R. D., Sweaburg	Shorthorns.
Dale, Robt., Brampton	Shorthorns.
Darrach, E. J., Pendleton	Ayrshires.
Datars, Henry, Hills Green	Shorthorns.
Davidson, Chas., Acton	Shorthorns.
Davidson, E. G., Ayer's Flats, Que	Ayrshires.
Davidson, J. D., Belhaven	Shorthorns.
Davidson, J. F., Cheltenham	Shorthorns.
Davidson, J. L., Balsam	Shorthorns.
Davidson, Jno., Ashburn	Shorthorns.
Davis, Geo., Alton	Aberdeen-Angus.
Davis, H. J., Woodstock	Shorthorns
Davis, J. F., Tempo	Shorthorns.
Davis, Jno. & Son, Foley	Shorthorns.
Dawes & Co., Lachine, Que	Ayrshires.
Dawson, Adam, Cannington	Shorthorns.
Dawson, Peter, Bailleboro	Shorthorns
Dawson, Wm., Vittoria	Shorthorns.
Death, Geo. T., Dixie	Holstein-Freisians.
DeCourcy, Daniel, Bornholm	Shorthorns.
Dedels, Jno., Kossuth	Shorthorns.
De Jex, Ed. H., Kerwood	Shorthorns.
Dempsey, Jno., Fairview	Shorthorns.
Dennis, Arsene, St. Norbert, Que	Ayrshires.
Dennis, Edgar, Newmarket	Holstein-Friesians
Denny, Jas., Norval	Shorthorns.
Dent, T. H., Woodstock	Holstein-Friesians.
Denyes, H. K., Foxboro	Ayrshires.
Dept. of Agriculture, Edmonton, Alta	Herefords.
DesChamps, Louis, St. Paul L'Ermite, Que	Ayrshires.
Devitt, I., Freeman	Shorthorns.
Dick, A. P., Ashgrove	Aberdeen-Angus.
Dickieson, R. & Sons, Guelph	Shorthorns.
Dickieson, W. A., Rockwood	Shorthorns.
Diefenbacher, C. C., Hawkesville	Shorthorns.
Digby, Jas., Hobart	Shorthorns.
Dingwall, Jas., Williamstown	Ayrshires.
Dingwall, Wm. & R., Hopeville	Shorthorns.
Disher, D. D., Effingham	Shorthorns.
Disney, Jno. E., Greenwood	Shorthorns.
Dixon, Jas. & Son, Russelton	Shorthorns.
Dixon, Mrs. Homer, Niagara Falls S	Ayrshires.
Dixon, Wm. & Sons, Maguire	Shorthorns.
Dobie, Jas. M., Ventnor	Ayrshires.
Dobson, Robt., Epsom	Shorthorns.
Docker, Robt. F. & Bros., Dunnville	Shorthorns.
Dodson, R. E., Comber	Shorthorns.
Doherty, Wm. & Co., Clinton	Shorthorns.
Doherty, Jno., Hastings	Shorthorns.
Doig, Jno., LaChute, Que	Ayrshires.
Dolson, A. J., Chatham	Shorthorns.
Donaldson, J. J., South Zorra	Shorthorns.
Donaldson, Wm., South Zorra	Shorthorns.
Donaldson, Jas., Dewittville, Que	Ayrshires.
Donnelly Bros., Allison	Shorthorns.

Donovan, J. M., Coldbrook, N.B.....Ayrshires.
Douglas, Jas., Caledonia.....Shorthorns.
Douglass, Jno. H., Warkworth.....Shorthorns, Ayrshires.
Douglas, W. A., Tuscarora.....Shorthorns.
Downey, Jas., Fordwich.....Herefords.
Doyle, Jno., Elora.....Shorthorns.
Doyle, R. J., Owen Sound.....Shorthorns.
Dredge, Wm. & Sons, Nassagaweya.....Shorthorns.
Drummond, A. & J., Clifford.....Shorthorns.
Drummond, H. A., Millgrove.....Shorthorns.
Drummond, A. McD., Petite Cote, Que.....Ayrshires.
Dryden, W. A., Brooklin.....Shorthorns.
Drysdale, Thos, Allan's Corners, Que.....Ayrshires.
Duck, Peter, Grafton.....Shorthorns.
Duncan, A. & Son, Carluke.....Shorthorns.
Duggan, Jas., Schomburg.....Shorthorns.
Dunfield Bros., Dauphin, Man.....Ayrshires.
Dunkin, T. L., Norwich.....Holstein-Friesians.
Dunlop, Jas., Hamilton.....Shorthorns.
Dunlop, Samuel, Eady.....Shorthorns.
Dunn, Andrew, Ingersoll.....Holstein-Friesians.
Durie, Jno., Owen Sound.....Shorthorns.
Dutton, Joseph, Comber.....Shorthorns.
Dyer, W. D., Columbus.....Shorthorns.
Dyment, N., Clappison's Corners.....Ayrshires.
Dyment, S., Barrie.....Shorthorns.
Eadie, A. G., Vars.....Ayrshires.
Eadie, Jno. R., Russell.....Ayrshires.
Eadie, J. W., Vars.....Ayrshires.
Eaglson, A. E., Cold Springs.....Shorthorns.
Eakins, Robt., Little Britain.....Shorthorns.
Easterbrook, W. H., Freeman.....Shorthorns.
Easton Bros., Charlottetown, P.E.I.....Ayrshires.
Eaton, T. & Co., Toronto.....Shorthorns.
Eckhardt, Jno., Bunessan.....Shorthorns.
Ede, P. D., Oxford Centre.....Holstein-Friesians.
Edmondson, Alex., Brantford.....Shorthorns.
Edmondson, Chris., Brantford.....Holstein-Freisians.
Edwards, Isaac, Beachville.....Shorthorns.
Edwards, W. C. & Co., Rockland.....Shorthorns, Ayrshires.
Elder, Jno., Hensall.....Shorthorns.
Elderedge, Jno., Hepworth Sta.....Shorthorns.
Ellenton, Jno. & Son, Hornby.....Shorthorns.
Elliot, Emerson, Brownsville.....Shorthorns.
Elliott, Geo. S., Tillsonburg.....Holstein-Friesians.
Elliott, Jas., Tatehurst, Que.....Ayrshires.
Elliott, Jno., Marden.....Shorthorns.
Elliott, Thos., Regina, Sask.....Herefords.
Elliott, W. F., Coleman.....Holstein-Friesians.
Elliott, Wm. & Sons, Porter's Hill.....Herefords.
Elliott, W. R. & Sons, Guelph.....Shorthorns.
Elrick, W. & J., Hillsdale.....Shorthorns.
Ely, Reuben, Winfield.....Shorthorns.
Emmett, C. D., Southend.....Holstein-Friesians.
Empey, Adam, Springfield.....Ayrshires.
Erwin, Robt., Villa Nova.....Shorthorns.
Evans, G. E., Allenford.....Shorthorns.
Evans, Robt. J., Wiarton.....Shorthorns.
Ewing, F. W., Salem.....Shorthorns.
Ewing, O. J., Rosemont.....Shorthorns.
Eydt, And., Poole.....Shorthorns.
Eyre, H. E., Chantry.....Ayrshires.
Fairbairn, H. K., Thedford.....Shorthorns.
Fairbairn, Jno., Yeovil.....Shorthorns.
Fairbairn, T., Billing's Bridge.....Ayrshires.
Fallows, H. S., Evelyn.....Shorthorns.
Faris, P. M., Bradford.....Shorthorns.
Farlinger, W. K., Morrisburg.....Ayrshires.
Farr, C. A., Petrolia.....Shorthorns.
Farrow, Alf., Speedside.....Shorthorns.
Feighen, W., Ravenna.....Shorthorns.
Fenton Bros., Solsgirth, Man.....Hereford.
Ferguson, Alex., Sonya.....Shorthorns.
Ferguson, Fred S., Inverary.....Holstein-Friesians.
Ferguson, Geo., A., Tillsonburg.....Holstein-Friesians.
Ferguson, Jno, Camlachie.....Ayrshires.
Ferguson, Jno. A., Marshfield, P. E. I.....Ayrshires.
Ferguson, R. P., Blackstock.....Shorthorns.
Ferris, A. & Sons, Stanton.....Shorthorns.
Ferris, Jas. & Sons, Whitfield.....Shorthorns
Field, W. H. & J. C., Vanessa.....Shorthorns.
Fierheller, C. D., Mt. Elgin.....Holstein-Friesians.
Fierheller, E. E., Mt. Elgin.....Holstein-Friesians.
Fischer, H., Carlingford.....Shorthorns.
Fisher, E. T., Ashburn.....Shorthorns.
Fisher, G. E., Chatham, N.B.....Ayrshires.
Fisher, M. Vicars, Glanworth.....Holstein-Friesians.
Fisher, Hon. Sydney, Ottawa.....Ayrshires.
Fisher, Wm., Estate, Ashgrove.....Shorthorns.
Fitch, Val, Oriel.....Shorthorns.

MEMBERS OF DOMINION CATTLE BREEDERS' ASSOCIATION, 1907 AND 1908.—*Continued.*

Name and Address	Breed
Fitzgerald Bros., Mt. St. Louis	Shorthorns.
Flatt, D. C., Millgrove	Holstein-Friesians.
Flatt, Jno. L., Millgrove	Holstein-Friesians.
Fleming, Adam, Milverton	Shorthorns.
Fleming, Alex., Kilsyth	Shorthorns.
Fleming, Henry, Craigleith	Herefords.
Fletcher, D., Fletcher	Shorthorns.
Fletcher, D. C., Mayfair	Shorthorns.
Fletcher, Geo., B., Binkham	Shorthorns.
Forbes, Duncan, Brocksden	Shorthorns.
Forbes, Geo., Winterbourne	Shorthorns.
Forbes, Jno., Kertch	Shorthorns.
Forester, M. A. S., Oakville	Aberdeen-Angus.
Forget, Rev. J. A., Embrun	Ayrshires.
Forrest, Jas, Lebanon	Shorthorns.
Foster, A. D., Bloomfield	Holstein-Friesians.
Forsyth, J. M., North Claremont	Shorthorns.
Foster, A. H., Twin Elm	Shorthorns.
Foster, E. C., Inglewood	Shorthorns.
Foster, E. P., Dundela	Ayrshires.
Foster, H. B., Bowmanville	Shorthorns.
Found, Jas., Dunbarton	Shorthorns.
Fowler, R. N., Ventry	Shorthorns.
Fraser, W. H. A., Ottawa	Shorthorns.
Fried, Allan, Roseville	Shorthorns.
Frank, A. & Sons, The Grange	Shorthorns.
Francis, J. A., Pakenham	Shorthorns.
Fraser, Mrs. Agnes, Weston	Holstein-Friesians.
Fry, C. C., Bright	Holstein-Friesians.
Fry, Wm., Sutton West	Shorthorns.
Fuller, G. T., Watford	Shorthorns.
Fyles, F. F., Abercorn, Que	Ayrshires.
Gainor, W. H. & Son, Wellandport	Shorthorns.
Galbraith, Thos., Omagh	Shorthorns.
Galbraith, W. A., Dutton	Shorthorns.
Garbutt, Geo., Strathavon	Shorthorns.
Garbutt, H. C., Lakefield	Shorthorns.
Garbutt, Jno. & Son, Peterboro	Shorthorns
Gardhouse, C. S., Humber	Shorthorns.
Gardhouse, H. A., Highfield	Shorthorns.
Gardhouse, Jas. M., Weston	Shorthorns.
Gardhouse, Jno. & Sons, Highfield	Shorthorns.
Gardiner, Alex., Leadbury	Shorthorns.
Gardiner, F. A., Britannia	Shorthorns.
Garnham, E. A., Straffordville	Shorthorns.
Garnham, J. A., Guyshoro	Shorthorns.
Gaw, James, Sheffordvale, Que	Ayrshires.
George, E. D., Putnam	Holstein-Friesians.
George, H. E., Crampton	Holstein-Friesians.
Gerrie, W. G., Belwood	Shorthorns.
Gibb, Jas., Brooksdale	Shorthorns.
Gibbons, W. T., Northcote	Ayrshires.
Gibson, Jno. T., Denfield	Shorthorns.
Gibson, Wm. & Sons, Wellesley	Shorthorns.
Giddies, Willis, Blenheim	Shorthorns.
Gier, Geo., Grand Valley	Shorthorns, Holstein-Friesians.
Gies, C. R., Heidelberg	Shorthorns, Holstein-Friesians.
Giffen, Alex., Snelgrove	Shorthorns.
Gilbert, H. J., Dereham Centre	Holstein-Friesians.
Gilbraith, R., Shelburne	Aberdeen-Angus.
Gill, Jas., Shallow Lake	Shorthorns.
Gillies, Wm., Robb	Herefords.
Gillis, J. Estate, Teeswater	Shorthorns.
Gillis, W., Bowood	Shorthorns.
Gilmore, Jas., Lothian	Shorthorns.
Gilmore, Wm. O., Gowanstown	Shorthorns.
Gilmore, Smith, Tamworth	Shorthorns.
Gilroy, C. J., Glen Buell	Holstein-Friesians.
Gilroy, G. A., Glen Buell	Holstein-Friesians.
Gilroy, Jos., Lyn	Ayrshires.
Gilroy, W. T. H., New Lowell	Shorthorns.
Girouard, Adolphe, St. Barnabe, Que	Ayrshires.
Girouard, Eli, St. Victoire, Que	Ayrshires.
Glasgow, Thos., Tupperville	Shorthorns.
Glazier, D. N., Brockville	Holstein-Friesians.
Gleason, Reuben, Medina	Holstein-Friesians.
Glen, Robt., Brampton	Shorthorns.
Goggin, Jno. J., Carberry, Man	Herefords.
Golden, A. J., Amherstburg	Shorthorns.
Golding, Henry, Ingersoll	Shorthorns.

Gooderham, D. J., Thornhill.....Holstein-Friesians.
Goodfellow, Jno., Myers Hall.....Shorthorns.
Goodliffe, Syd. J., Sussex, N.B.....Ayrshires.
Gordon, Jno., Vroomanton.....Shorthorns.
Gordon, Hector, Howick, Que.....Ayrshires
Gosnell, L. J., Highgate.....Shorthorns.
Gough, Ed., Powassan.....Shorthorns.
Gouin, P. A , Three Rivers, Que.....Ayrshires.
Gould, Geo. G., Edgar Mills.....Shorthorns.
Gould, Wm., Rutherford.....Shorthorns.
Govenlock, J. A., Forest.....Herefords.
Gowan, Thos., Bryanston.....Shorthorns.
Gowanlock, John, Port Elgin.....Shorthorns.
Graham, Jas., Saintfield.....Shorthorns.
Graham, Jas., Grand Valley.....Shorthorns.
Graham, Mrs. J. A., Everett.....Shorthorns.
Graham, J. A., Britannia Bay.....Shorthorns.
Graham, John B., Lindsay.....Shorthorns.
Graham, Jos., South Woodslee.....Shorthorns.
Graham, J. T., Vandeleur.....Shorthorns.
Graham, R., Ashgrove.....Shorthorns.
Graham, Thos., Port Perry.....Shorthorns.
Graham, Thos., Uxbridge.....Shorthorns.
Graham, Thos., Bell's Corners.....Shorthorns.
Graham, T. J., Britannia Bay.....Shorthorns.
Grainger, Geo., Stayner.....Shorthorns.
Grainger, Wm. & Son, Londesboro.....Shorthorns.
Grant, John, Harriston.....Shorthorns.
Grandy, R. C., Springville.....Shorthorns.
Greason, Hy., Granthurst.....Shorthorns.
Greenlees Bros., Milton.....Shorthorns.
Greenshields, J. N., Danville, Que.....Ayrshires.
Greenway, W. J., Cambray.....Shorthorns.
Greenway, W. R., Woodville.....Shorthorns.
Greenway, Hon. Thos., Crystal City, Man.....Ayrshires.
Greenwood, John, sr., Queensville.....Shorthorns.
Greer, Wm., Ormstown, Que.....Ayrshires.
Gregg, F. H., Salford.....Holstein-Friesians.
Greig, Wm., Allan's Corners, Que.....Ayrshires.
Grey, A. N., Eden.....Holstein-Friesians.
Griffin, F. J., Burgessville.....Holstein-Friesians.
Grigg, Chas., Roseneath.....Shorthorns.
Grigg, Walter, Roseneath.....Shorthorns.
Griffith, I. & J., Wallace.....Shorthorns.
Groat, Chas., Brooklin.....Shorthorns.

Groff, I. & A., Alma.....Shorthorns.
Groff, Israel, Alma.....Shorthorns.
Grosjean, J. L., Brookside.....Holstein-Friesians.
Gummer, Geo. A., Colborne.....Shorthorns.
Gunn, Donald & Son, Beaverton.....Shorthorns.
Gustin, S. N., Fitch Bay, Que.....Ayrshires.
Guy, F. T., Darlington.....Ayrshires.
Guy, W. H., Maxwell.....Shorthorns.
Hagerman, B. E., Minto.....Holstein-Friesians.
Hahn, Geo., Mildmay.....Shorthorns.
Haldon Bros., Turgoose, B.C.....Ayrshires.
Hales & McNeil, Dutton.....Herefords.
Haley, M. H., Springford.....Holstein-Friesians.
Haley, M. L., Springford.....Holstein-Friesians.
Hall, A. W., Millbank.....Shorthorns.
Hall, Jas., Snelgrove.....Shorthorns.
Hall, T. J., Grand Valley.....Shorthorns.
Hall, Walter, Washington.....Aberdeen-Angus.
Hall, Wm., Cambray.....Shorthorns.
Hallman, A. C., Breslau.....Holstein-Friesians.
Hamill, W. H., Beeton.....Herefords.
Hamill, H. C., Islay.....Ayrshires.
Hamilton Bros., Glen Huron.....Shorthorns.
Hamilton, F. R., Cromarty.....Shorthorns.
Hamilton, John, Grand Freniere, Que.....Ayrshires.
Hamilton, John, Lisgar.....Shorthorns.
Hamilton, Wm., Bright.....Shorthorns.
Hamilton, W., Chesterville.....Ayrshires.
Hambly, G. E., Hepworth.....Shorthorns.
Hammon, Alex., Wellesley.....Shorthorns.
Hamwood, Arthur W., Craigleith.....Herefords.
Hancock, Fred, Oakwood.....Shorthorns.
Hand, John & Son, Tancred.....Shorthorns.
Hanley, J. C., Read.....Shorthorns.
Hanmer, E. E., Norwich.....Holstein-Friesians.
Hanmer, Willoughby, New Durham.....Holstein-Friesians.
Hanna, Abraham, Ventry.....Shorthorns.
Hanna, John, Kirkton.....Shorthorns.
Hanna, Wm., Byng.....Shorthorns.
Hanson, Thos., Motherwell.....Shorthorns.
Harbottle, G. J., Kilbride.....Shorthorns.
Harding, R. H., Thorndale.....Shorthorns.
Hardy, Wellington, Roland, Man.....Ayrshires.
Hare, Wm. A., Sandfield.....Shorthorns.
Harkness & Sons, Irena.....Ayrshires.

MEMBERS OF DOMINION CATTLE BREEDERS' ASSOCIATION, 1907 AND 1908.—*Continued.*

Name and Address	Breed
Harman, Rd., Temperanceville	Shorthorns.
Harris, Frank, Mount Elgin	Ayrshires.
Harris, T. P., Gowrie	Shorthorns.
Harrison Bros., Mount Albert	Herefords.
Harrison, Frank, Mount Albert	Herefords.
Harrison, George, Kincardine	Holstein-Friesians.
Harrison, Jas. E., Kincardine	Holstein-Friesians.
Harrison, Josh, York Mills	Holstein-Friesians.
Hart, Jacob, Saurin	Shorthorns.
Hartley, Miles, Norwich	Holstein-Friesians.
Hartley, Stephen, New Durham	Holstein-Friesians.
Hartley, Thomas, Downsview	Holstein-Friesians.
Hartley, W. A., New Durham	Holstein-Friesians.
Harvie, J. R., Orillia	Shorthorns.
Harvey, Robt., Guelph	Shorthorns.
Hastings Bros., Cross Hill	Shorthorns.
Hauser, Ig., Weisenburg	Shorthorns.
Hawksworth, M., Medina	Shorthorns.
Hawse, W. H., Athens	Holstein-Friesians.
Hay, Jas., Swinton Park	Shorthorns.
Hay, Wm., Tara	Shorthorns.
Hay, Wm., Howick, Que.	Ayrshires.
Heard, J. A., Flesherton	Shorthorns.
Heaslip, C., Fairbairn	Shorthorns.
Heeney, Fred V., Ingersoll	Holstein-Friesians.
Henderson, Thos., Glencoe	Shorthorns.
Henderson, R. N., Morton, Man.	Ayrshires.
Hendrie, Wm., Estate, Hamilton	Shorthorns.
Hendy, Chas., Campbellford	Ayrshires.
Henry, John A., Arthur	Shorthorns.
Hensman, W. G., Essex	Ayrshires.
Herbst, George, Alsfeldt	Holstein-Friesians.
Heron, Jas. & A., Ashburn	Shorthorns.
Heron, Robt., Billing's Bridge	———.
Herron, J. H., Courtland	Holstein-Friesians.
Hickling, C. M., Barrie	Shorthorns.
Hicks, R. F., Newton Brook	Holstein-Friesians.
High, Isaac W., South Cayuga	Holstein-Friesians.
Hill, David, Staffa	Shorthorns.
Hill, Ge., Delaware	Ayrshires.
Hill, Jas. J., Speedside	Herefords.
Hill, J. W., Summerhill	Shorthorns.
Hill, J. W., St. Thomas	Holstein-Friesians.
Hill, G. H. & Sons, Otterville	Shorthorns.
Hiscott, Wm., Virgil	Shorthorns.
Hisey, John, Cashtown	Shorthorns.
Hislop, And., Brussels	Shorthorns.
Hislop, James, Stratford	Shorthorns.
Hodgins, Geo. A., Carp	Shorthorns.
Hodgins, J. J., Hazeldean	Shorthorns.
Hodson, F. W., Toronto	Ayrshires.
Hoffarth, Jos., Carlsruhe	Shorthorns.
Hoffman, Geo. D., Wellesley	Shorthorns.
Hogg, Wm. & Son, Thamesford	Shorthorns.
Holdsworth, R. L., Port Hope	Shorthorns.
Holgate, John A., Foxboro.	Holstein-Friesians.
Holland, Ed. & Sons, Harriston	Shorthorns.
Holmes, Marshall, Nassageweya	Shorthorns.
Holmes, Samuel, Chatham	Shorthorns.
Holtby, Benj., Belmont	Holstein-Friesians.
Holtby, John, Wyecombe	Shorthorns.
Hood, G. B., Guelph	Shorthorns.
Hoover, D. & Sons, Selkirk	Shorthorns.
Hope, C. & J., Scugog	Shorthorns.
Hopkins, H. J., Sturgeon Falls	Shorthorns.
Hopps, Benj., Campbellford	Holstein-Friesians.
Hopps, John, Campbellford	Holstein-Friesians.
Hord, Jas. & Sons, Ilderton	Shorthorns.
Hostetler, C., New Hamburg	Shorthorns.
Houldershaw, John M., Nottawa	Shorthorns.
Housam, F., Greenbank	Shorthorns.
Houston, John & Sons, Chatham	Shorthorns.
Howard, Jas. L., Sutton West	Shorthorns.
Howden, John, St. Louis Sta., Que.	Ayrshires.
Howe, F., Crampton	Holstein-Friesians.
Howell, E. W., Jerseyville	Shorthorns
Hubbs, Ernest A., Chisholm	Holstein-Friesians.
Hubbs, Louis P., Hillier	Holstein-Friesians.
Hubbs, Wm. A., Chisholm	Holstein-Friesians.
Hughes, John A., Peticodiac, N.B.	Ayrshires.
Hulet, A. E., Norwich	Holstein-Friesians.
Hume, A., Menie	Ayrshires.

Hundt, Jos. P., Carlsruhe ..... Shorthorns.
Hunken, R., Londesboro ..... Shorthorns.
Hunt, John, Russell ..... Ayrshires.
Hunter, J. A., Durham ..... Herefords.
Hunter, Robt , sr., Maxville ..... Ayrshires.
Hunter, R., jr , Maxville ..... Ayrshires.
Hunter, R. D., Exeter ..... Shorthorns.
Hunter, Wm., Maxville ..... Ayrshires.
Hunter, W. D., Napanee ..... Shorthorns.
Hunter, W. H., Napanee ..... Shorthorns.
Hunter, W. H., The Maples ..... Herefords.
Humphrey, Frank E., Brock Road ..... Shorthorns.
Ingram, Thos., Manitowaning ..... Shorthorns.
Intz, J. Z , Baden ..... Shorthorns.
Irving, Arch., Scotstown, Que ..... Ayrshires.
Irving, Thos., North Georgetown, Que ..... Ayrshires.
Irwin, J. M., Branchton ..... Shorthorns.
Isaac, W. J., Harwood ..... Shorthorns.
Isaac, John, Markham ..... Shorthorns.
Jackson, Geo. & Son, Downview ..... Shorthorns.
Jackson, Jas., Scugog ..... Shorthorns.
Jackson, S. & F., Oxford Centre ..... Shorthorns.
Jackson, W. K., 1318 Niagara St., Buffalo, N.Y. Ayrshires.
Jackson, J. E., Brome, Que ..... Ayrshires.
Jacobs, A H , Blyth ..... Shorthorns.
James, D. A., Nilestown ..... Ayrshires.
Jamieson, Mrs. David, Hillsdale ..... Shorthorns.
Jamieson, J. A., Thornton ..... Shorthorns.
Jamieson, John J., Kirkwall ..... Shorthorns.
Jamieson, W. & J., Kintail ..... Shorthorns.
Jansen, Jos., Wheatley ..... Shorthorns.
Jantzi, Jonathan, Baden ..... Holstein-Friesians.
Jardin, David S., Nelson ..... Holstein-Friesians.
Jasper, Thos. H., Walkerton ..... Shorthorns.
Jeffrey, Alex., Whitby ..... Shorthorns.
Jeffrey Bros., Whitby ..... Shorthorns.
Jeffs, Ed. & Son, Bond Head ..... Shorthorns.
Jenkins, Jos., Pearcley ..... Herefords.
Jerome, Holbert, Glanford ..... Holstein-Friesians.
Jewell, A., Woodville ..... Shorthorns.
Jewell, H. W., Bowmanville ..... Shorthorns.
Jones, D., jr., Caledonia ..... Holstein-Friesians.
Jones, J. H., Balsam ..... Shorthorns.
Johnson, Wm., Delta ..... Holstein-Friesians.
Johnson, Wm. H., Avon ..... Holstein-Friesians.

Johnson, J. W., Sylvan ..... Holstein-Friesians.
Johnston, Alex., Cathcart ..... Shorthorns.
Johnston, A. G., Strongville ..... Shorthorns.
Johnston, Arthur, Greenwood ..... Shorthorns.
Johnston, C. L., Rosedene ..... Shorthorns.
Johnston, D. B., Lansdowne ..... Ayrshires.
Johnston, Geo. H., Claremont ..... Shorthorns.
Johnston, Jas., Underwood ..... Shorthorns.
Johnston, Geo., Flesherton ..... Shorthorns.
Johnston, Jas. H., Hillsdale ..... Shorthorns.
Johnston, Jos. H., Stayner ..... Shorthorns.
Johnston, Robt., Brampton ..... Shorthorns.
Johnston, Richard, Putnam ..... Holstein-Friesians.
Johnston, S. F., Ashburn ..... Shorthorns.
Jopling, J. G. & Sons, Bridgenorth ..... Shorthorns.
Jull, Geo., Ranelagh ..... Holstein-Friesians.
Kains, Arch., Byron ..... Ayrshires.
Karcher, Wm., Port Elgin ..... Shorthorns.
Kay, W. F., Philipsburg ..... Ayrshires.
Kearns, Byron, Park Hill ..... Shorthorns.
Keene, W. L., N. Vancouver, B.C. ..... Ayrshires.
Kehoe, John J., Coventry ..... Shorthorns.
Kellington, John M., Ravenshoe ..... Shorthorns.
Kelly, Arthur, Kelvin ..... Holstein-Friesians.
Kelly, Byron, Kelvin ..... Holstein-Friesians.
Kelly, John, Shakespeare ..... Shorthorns.
Kelly, R. J., Hagersville ..... Holstein-Friesians.
Kelly, Wm. & Sons, Paris ..... Shorthorns
Kemp, Geo., Munro ..... Shorthorns.
Kendrick, Albert, Comber ..... Shorthorns.
Kendrick, Jas., Essex ..... Shorthorns.
Kennedy, A., Ayr ..... Holstein-Friesians.
Kennedy, Archie & Sons, Vernon ..... Ayrshires.
Kersall, And., St. George ..... Shorthorns.
Ketchen, Geo A., Wallbridge ..... Ayrshires.
Kier, Ormond, Rutherford ..... Shorthorns.
Kilpatrick, Geo., Prince Albert ..... Shorthorns
Kimmerly, Austin, Deseronto ..... Shorthorns.
Kincaid, C. A., Barriefield ..... Holstein-Friesians.
Kingston, John, sr., West Huntingdon ..... Holstein-Friesians.
Kinsey, E., Doon ..... Ayrshires.
Kinsey, Jos., Doon ..... Ayrshires.
Kirby, Jos., Armstrong Mills ..... Shorthorns.
Kirk, C. & Bros., Maplewood ..... Shorthorns.
Kirkwood, Gavin, Chesley ..... Shorthorns.

MEMBERS OF DOMINION CATTLE BREEDERS' ASSOCIATION, 1907 AND 1908.—*Continued.*

Name and Address	Breed
Kitchen, D. D., Renton	Holstein-Friesians.
Kitchen, Frederick D., Renton	Holstein-Friesians.
Kitchen, S. G., St. George	Holstein-Friesians.
Kitely, John J., Dunkerron	Shorthorns.
Kissock, And., Crown Hill	Shorthorns.
Klock, Alonzo, Aylmer	Ayrshires.
Knight, Joshua, Elginburg	Ayrshires.
Knox, Bros., Chesterfield	Shorthorns.
Knowles Bros., Cookstown	Shorthorns.
Kohler Bros., Cayuga	Shorthorns.
Kolb, E. B. & T. L., Berlin	Shorthorns.
Krenger, Louis, Alsfeldt	Shorthorns.
Kyle Bros., Ayr	Shorthorns.
Labissionnere, Louis, Champlain, Que.	Ayrshires.
Lachapelle, Napoleon, St. Paul l'Ermite, Que.	Ayrshires.
Laidlaw, E. W. H., Aylmer	Holstein-Friesians.
Laidlaw, Geo. A., Aylmer West	Holstein-Friesians.
Laidlaw, Lloyd, K., Aylmer	Holstein-Friesians.
Lamb, Wm., Bury's Green	Shorthorns.
Lambert, T. W., Thornbury	Shorthorns.
Lambkin, W. L., Fordwich	Holstein-Friesians.
Landon, J. B. & Sons, Lansdowne	Shorthorns.
Lane, Jas. C., Arkona	Shorthorns.
Langlier, Gus. A., Cap Rouge, Que.	Ayrshires.
Lattimer, J. A., Woodstock	Shorthorns.
Lavalle, Paul, St. Guillaume, Que.	Ayrshires.
Lavalle, Paul, Berthier, Que.	Ayrshires.
Laviolette, Nicholas, Virginia	Shorthorns.
Lawrence, Alex., Thamesville	Shorthorns.
Lawrence, Jos., London	Shorthorns.
Lawrence, W. H., Honeywood	Shorthorns.
Leach, Robt., Watford	Herefords.
Lear, F. L., Orland	Ayrshires.
Leask, Jas., Greenbank	Shorthorns.
Leask, Jas., Taunton	Shorthorns.
Leask, John, Seagrave	Shorthorns.
Lee, Alex., Greenbank	Shorthorns.
Lee, John & Sons, Highgate	Shorthorns.
Lee, J. W., Simcoe	Holstein-Friesians.
Lee, R. S., Williamsford	Herefords.
Lee, Thos. & Sons, Muirkirk	Shorthorns.
Leeson, F., Aylmer	Holstein-Friesians.
Legge, John, St. Marys	Shorthorns.
Legge, T. H., Temperanceville	Shorthorns.
Leggett, R. J., Connor	Shorthorns.
Legris, N., St. Leon de Maskinonge, Que.	Ayrshires.
Leipold, Philip, Calderwood	Shorthorns.
Leitch, D., Cornwall	Ayrshires.
LeMaistre, J. C., Peribonca, Que.	Ayrshires.
Lemon, Jas., Walter's Falls	Shorthorns.
Lemon, Samuel, Lynden	Holstein-Friesians.
Lennox, Jas. A., Thornton	Shorthorns.
Leslie, Geo. & Sons, Rockwood	Shorthorns.
Leslie & Pearen, Acton	Shorthorns.
Lester, H. A., Burford	Holstein-Friesians.
Lewis, Geo., Ballymote	Shorthorns.
Lewis, T. D., Claresholm, Alta	Herefords.
Lick, Luther, Oshawa	Shorthorns.
Liddycoat, N. D., Clappison	Ayrshires.
Lindsay, Wm., Caledon East	Shorthorns.
Linton, Wm., Claremont	Shorthorns.
Lishman, John Hagersville	Shorthorns.
Little, Jas. D., Teeswater	Herefords.
Little, John, Mono Road	Shorthorns.
Little, J. O., Sand Hill	Shorthorns.
Little, Robert H., Beachburg	Shorthorns.
Littlejohn, R. W., Ridgetown	Shorthorns.
Littlejohn, J. C., Highgate	Shorthorns.
Lochhead, J. M., Centreville	Shorthorns.
Locke, John, Campbellford	Ayrshires.
Logan, J. W., Allan's Corners, Que.	Ayrshires.
Logie, H. C., Lindsay	Shorthorns.
Long, W. F., Cando, N. Dakota	Herefords.
Longstaff Bros., Wallaceburg	Shorthorns.
Lorch, Albert, Elmira	Holsteins-Friesians.
Lough, Chas. S., Ida	Shorthorns.
Lortie, Eugene, Quebec, Que.	Ayrshires.
Loveless, R. M., Agincourt	Holstein-Friesians.
Lovering, J. A., Lovering	Herefords.
Low, John, Elora	Aberdeen-Angus.
Lowes, R. S., Bosworth	Shorthorns.
Ludlam, Wm., Comber	Shorthorns.

Lussier, Alphonse, St. Charles, Que. ..... Ayrshires.
Lussier, Arthur, Varennes. Que. ..... Ayrshires.
Lyons, David, Byng..... ..... Shorthorns.
Lyons, Samuel, Byng ..... Shorthorns.
Lyons, H., Berwick, N.S. ..... Ayrshires.
Mace, S. M., Pekisko, Alta..... Herefords.
Mackay, Hugh, St. Thomas ..... Shorthorns.
Mackay, Peter, Egmondville..... Shorthorns.
Mackie, R.J., Oshawa..... Herefords.
Mackie Bros., Eburne, Man..... Ayrshires.
Mackintosh, Wm., Burgoyne ..... Shorthorns.
Macklin, S., Cobourg..... Holstein-Friesians.
Macklin, S., Streetsville ..... Holstein-Friesians
Mackie, Wm., Agassiz, B.C.... ..... Ayrshires.
MacLeod, W. D., Kirkhill..... Ayrshires.
Maguire, Chas., Wingham..... Shorthorns.
Major, Wm., Woodlawn ..... Shorthorns.
Mallory, B., Belleville ..... Holstein-Friesians.
Mallory, F. R., Frankford..... Holstein-Friesians.
Mallory, J. M., Bloomfield ..... Holstein-Freisians.
Mallott, M. J., Leamington..... Shorthorns.
Maloney, Pat, Metropolitan..... Shorthorns.
Mandville, Jas., Tyrrell ..... Shorthorns.
Manhard, G. H., Manhard ..... Holstein-Friesians.
Mannerow, A. & L., Desboro ..... Shorthorns.
Mann, Jas. H., Bridgenorth..... Shorthorns.
Manning, Chas., Londesboro..... Shorthorns.
Mansz, Hy. J., Tavistock..... Shorthorns.
Marion, Dr. A ,447 Sherbrooke St., Montreal, Que. Ayrshires.
Mark, Wm., J., Valentia..... Shorthorns.
Marples, J. E,, Deleau, Man. ..... Herefords.
Marquis, Geo., Victoria Corners..... Shorthorns.
Marr, Jos. F., Grovesend..... Shorthorns.
Marshall, Jos., Jackson..... Shorthorns.
Marshall, Richard, Lyn ..... Holstein-Friesians.
Martin, A., Brechin..... Shorthorns.
Martin, A. & Sons, Tupperville ..... Shorthorns.
Martin. Allen W., Tintern..... Shorthorns.
Martin, R. B., Bothwell ..... Holstein-Friesians.
Martin, R. B., Murillo ..... Shorthorns.
Martin, R. B., Elmira..... Holstein-Friesians.
Martindale, F. & Sons, York..... Shorthorns.
Martyn, J. W., Canton ..... Shorthorns.
Mason, W. J. & Son, Oliphant..... Shorthorns.
Massicotte, Clair, St. Prosper, Que. ..... Ayrshires.

Matchett, Rd. C., Millbrook..... Shorthorns.
Meadows, A. E., Port Hope..... Shorthorns.
Meadows, David P., Brooksdale..... Shorthorns.
Mederaft, T. H., Sparta ..... Shorthorns.
Melick, Aaron, Smithville ..... Ayrshires.
Melvin, David, Winchester ..... Shorthorns.
Mercer, Thos., Markdale ..... Shorthorns.
Mercer, Bros., Thamesford ..... Shorthorns.
Meyer, A. E., Guelph..... Shorthorns.
Michael, R. T., Brooklin..... Shorthorns.
Michel, Conrad, Cranbrook..... Shorthorns.
Michener, M., Dunnville..... Shorthorns.
Michener, Martin, Summerstown ..... Ayrshires.
Mighton, Chas. N., Elora..... Shorthorns.
Milbee, Jas., Dalston ..... Shorthorns.
Mill, Leonard, Van Camp ..... Ayrshires.
Miller, And., Scugog..... Shorthorns.
Miller, Wm., Marshfield, P.E.I..... Ayrshires.
Miller Bros., Brougham..... Shorthorns.
Miller. John, Brougham..... Shorthorns.
Miller, John, Jr., Ashburn ..... Shorthorns.
Miller, John, McIntyre ..... Shorthorns.
Miller, Robert, J., Fonthill..... Holstein-Friesians.
Miller, Samuel, Wilfred ..... Shorthorns.
Millman, Wm., Dexter ..... Shorthorns.
Mills, A. R., Mono Mills..... Shorthorns.
Mills, Thos. D., Maria, Que..... Ayrshires.
Milne, R. & Sons, Green River..... Shorthorns.
Milson, W. G., Goring..... Shorthorns.
Minnis, Chas., Leamington..... Shorthorns.
Minor, Ira, Lowbanks..... Shorthorns.
Minthorne, A. E., Fenelon Falls ..... Shorthorns.
Mitchell, Geo., Clarksburg ..... Shorthorns.
Mitchell, Wm., Lancaster ..... Ayrshires.
Mitchel, I. R. & Sons, Nelson ..... Shorthorns
Mittlefehldt, A., Elcho..... Holstein-Friesians.
Mittlefehldt, J. H., Elcho..... Holstein-Friesians.
Mitton, W. J., Thamesville ..... Shorthorns.
Moffatt, W. G., Teeswater..... Shorthorns.
Moir, D., Andrewsville ..... Shorthorns.
Munro, Wallace, Millbrook, N.S..... Ayrshires.
Monteith, Henry, Stratford..... Shorthorns.
Montgomery, Elgin, South Mountain..... Ayrshires.
Montgomery, G. H., Phillipsburg, Que. ..... Ayrshires.
Montmorency, Geo. de, Woodstock..... Holstein-Friesians.

MEMBERS OF DOMINION CATTLE BREEDERS' ASSOCIATION, 1907 AND 1908 —*Continued.*

Name and Address	Breed
Modie, Wm., De Winton, Alta	Ayrshires.
Moore, Alex, Greenwood	Shorthorns.
Moore, Benj L., Burgessville	Holstein-Friesians
Moore Bros., Lakeview	Shorthorns.
Moore, Chas. C., Kingsville	Ayrshires.
Moore, C. M., Millbrook	Shorthorns.
Moore, G. & W., Harriston	Shorthorns.
Moore, Jas., Kirkton	Shorthorns.
Moore, Samuel, Cooksville	Shorthorns.
Moorehouse, Robt., Cairo	Shorthorns.
Morden, A. A., Wellington	Ayrshires.
Morgan, Harold P., Colonial House, Montreal, Que.	Ayrshires.
Morley Bros., Brinsley	Shorthorns.
Morrell, Rd., Harriston	Shorthorns.
Morrin, John, Belle Reviere, Que	Ayrshires.
Morrin, Thos., La Chute, Que	Ayrshires.
Morris, Geo. E., Comber	Shorthorns.
Morrison, D. & J., Leith	Shorthorns.
Morrison, Jas., Longburn, Man	Herefords
Morrison, John, Stanley Mills	Shorthorns.
Morrison, John, Winthrop	Shorthorns.
Morrison, Hy., Beaverton	Shorthorns.
Morrison, Peter, Argyle	Shorthorns.
Morrison, Wm., Edge Hill	Shorthorns.
Morrow, R. O., Hilton	Holstein-Friesians.
Mortimer, R. M., Honeywood	Shorthorns.
Moser, C. W., Berlin	Shorthorns.
Motheral, Jas, Drumbo	Holstein-Friesians.
Mott, W. D., Lyn	Holstein-Friesians.
Mountain, Wm, Varney	Shorthorns.
Mosseau, J. Bte., Berthier, Que	Ayrshires.
Mowbray, R. R., Kinsale	Shorthorns.
Moxley, Jas. H., Tilley	Holstein-Friesians.
Moynihan, J., Don	Holstein-Friesians.
Mulock, Sir Wm, Armitage	Shorthorns.
Muirhead, David, Renfrew	Shorthorns.
Mulhauser, Wm., Walkerton	Shorthorns.
Murdie, Michael, Winthrop	Shorthorns.
Murphy, Geo., Lindsay	Shorthorns.
Murphy, W. J., Rockburn, Que	Ayrshires.
Murphy, Jos., Rosemont	Shorthorns.
Murray, B. J., Martintown	Ayrshires.
Murray, Chas., Stamford	Shorthorns.
Mustard, R., Mongolia	Shorthorns.
Muxlow, W. & Sons, Petrolia	Shorthorns
Myles, Jas. A., Heathcote	Shorthorns.
McAllister, D., Comber	Shorthorns.
McAlpine, M. & Sons, Aughrim	Shorthorns.
McAlpine, J. H., Lower Cambridge, N.B.	Ayrshires.
McAnnish, John, Crief	Shorthorns.
McArthur, Gilbert, Ospringe	Shorthorns.
McArthur, Jas., Gobles	Shorthorns.
McArthur, P. D., N. Georgetown, Que.	Ayrshires.
McArthur, John, Paisley	Shorthorns.
McAvoy, C. C., Atha	Shorthorns.
McAvoy, John D., Balsam	Shorthorns.
McAvoy, T. C., Balsam	Shorthorns.
McBain, Geo., Acton	Shorthorns.
McBride, Wm. B., Grafton	Shorthorns.
McCabe, Anson, Mt. Wolfe	Shorthorns.
McCaig, Alex, Aberfoyle	Shorthorns.
McCallum, T. D., Danville, Que	Ayrshires.
McCallum, John, Iona Station	Shorthorns.
McCallum, J. R., Iona Station	Shorthorns.
McCullum, M., Darlingford, Man.	Shorthorns.
McCamus, Thomas., Bailliebord	Shorthorns.
McCartney, W. E., Milton	Shorthorns.
McCartney, Thos., Longburn, Man	Ayrshires.
McCaskill, Alex., Barb	Ayrshires.
McClelland, Jas., Nanticoke	Shorthorns.
McClure, T. A., Meadowvale	Shorthorns.
McColl, Samuel, Dutton	Shorthorns.
McCorkindale Bros., Guelph	Shorthorns.
McCormack, Jas., Rockton	Ayrshires.
McCormick, Chas. R., Ratho	Holstein-Friesians.
McCormack, J. W., Morewood	Holstein-Friesians.
McCormack, Henry, Paris	Shorthorns.
McCracken, Jas., Staples	Herefords.
McCrae, Wm. & Sons, Guelph	Shorthorns.
McCrae, J. L., Brockville	Holstein-Friesians.
McCubbin, John, Warkworth	Ayrshires.
McCubbin, Alex., Grand Freniere, Que	Ayrshires.

McCue, Jas. & Son, Melancthon ..... Shorthorns.
McCullough, John, Williamsford ..... Shorthorns.
McCurdy, J. R., Hazeldean ..... Shorthorns.
McCutcheon, Jas., Sandfield ..... Shorthorns.
McCutcheon, John, Croton ..... Shorthorns.
McDermid, J. A., Stayner ..... Herefords.
McDermott, Wm., Living Springs ..... Shorthorns.
McDonald, Arch., St. Marys ..... Shorthorns.
McDonald Bros., Woodstock ..... Shorthorns.
McDonald, Donald, Fassifern ..... Shorthorns.
McDonald, Dugald, Kinloss ..... Shorthorns.
McDonald, John, Dartford ..... Holstein-Friesians.
McDonald, John, New Glasgow, N. S. ..... Ayrshires.
McDonald, George A., Colborne ..... Shorthorns.
McDonald, George S., Stanley Mills ..... Shorthorns.
McDonald College, St. Anne de Bellevue, Que. .. Ayrshires.
McDonald, John, Nithburg ..... Shorthorns.
McDougall, D. & A., Malton ..... Shorthorns.
McDougall, F., Fenelon Falls ..... Shorthorns.
McDougall, Jas., Chatham ..... Shorthorns.
McDowell, M., Norwich ..... Holstein-Friesians.
McDowell, Wm., Compton, Que. ..... Ayrshires.
McEwen, John D., Falkirk ..... Shorthorns.
McEwing, Jas., Drayton ..... Shorthorns.
McEwing, A. W., Harlock ..... Aberdeen-Angus.
McFarlane, John, Dutton ..... Shorthorns.
McFarlane & Son, D. A., Kelso, Que. ..... Ayrshires.
McFarlane, John, Eden Mills ..... Shorthorns.
McFarlane, Jno., Leasboro ..... Shorthorns.
McFarlane, Robt., Howick Station, Que. ..... Ayrshires.
McFarlane, Jos., Hockley ..... Shorthorns.
McGarry, Wm., Perth ..... Shorthorns.
McGee, Alex., Fenelon Falls ..... Shorthorns.
McGhee, S. J., Beachville ..... Holstein-Friesians.
McGhee, Robt., Beachville ..... Holstein-Friesians.
McGill, John, Waverley ..... Shorthorns.
McGillawee, Archie, Hampstead ..... Shorthorns.
McGillicuddy, M. J., Kenilworth ..... Shorthorns.
McGoey, T. Q., Romilly ..... Shorthorns.
McGowan, W. B., Marsville ..... Shorthorns.
McGrath, Michael, Riverstown ..... Shorthorns.
McGregor Bros., Tilbury ..... Shorthorns.
McGregor Bros., Mimosa ..... Shorthorns.
McGregor, Peter, Muncey ..... Shorthorns.
McGregor, Wm. A., Kemble ..... Shorthorns.
McGugan, A. D., Rodney ..... Shorthorns.
McIlquhan, W. S., Lanark ..... Shorthorns.
McInnis, J. D., Glenpayne ..... Ayrshires.
McInnes, Angus, Goring ..... Shorthorns.
McIntosh, Peter, Cass Bridge ..... Ayrshires.
McIntosh, Alex., Nudell Bush ..... Ayrshires.
McIntyre, John, Ridgetown ..... Shorthorns.
McIntyre, A. W., Newington ..... Ayrshires.
McIntyre, Duncan, Campbellton ..... Shorthorns.
McIntyre, Ralph, Ashburn ..... Shorthorns.
McIntyre Bros., Sussex, N. B. ..... Ayrshires.
McIvor, John, McIvor ..... Shorthorns.
McKague, G. T., Bexley ..... Shorthorns.
McKay, David, Owen Sound ..... Shorthorns.
McKay, Hugh, Lucknow ..... Shorthorns.
McKee, H. & J., Norwich ..... Ayrshires.
McKee, John, Norwich ..... Ayrshires.
McKee, Geo., Winthrop ..... Shorthorns.
McKerracher, Wm. J., Harwich ..... Shorthorns.
McKenzie, John, Willowdale ..... Holstein-Friesians.
McKenzie, G. H., Thornhill ..... Holstein-Friesians.
McKenzie, John & Son, Columbus ..... Shorthorns.
McKenzie, John, Keward ..... Shorthorns.
McKenzie, J. F., St. Marys ..... Shorthorns.
McKericher, D. G., Howick, Que. ..... Ayrshires.
McKersie, Nathan, Rockwood ..... Shorthorns.
McKinnon, Alex., Coningsby ..... Shorthorns.
McKinnon, Alex., Badjeros ..... Shorthorns.
McKinnon Bros., Queen Hill ..... Shorthorns.
McKinnon, D. C., Atherley ..... Shorthorns.
McKinnon, A., Hillsburg ..... Aberdeen-Angus.
McKinnon, R. W., Coningsby ..... Aberdeen-Angus.
McKinny, Alex., Erin ..... Aberdeen-Angus.
McKnight, S. J., Epping ..... Shorthorns.
McKormick, D. A., Brysonville, Que. ..... Ayrshires.
McLaren, D. B., Carleton Place ..... Shorthorns.
McLaren, John A., 383 Wilbrod st., Ottawa ... Shorthorns.
McLaren, P. S., McGarry ..... Ayrshires.
McLean, Gordon, Athens ..... Holstein-Friesians.
McLean, W J., Elm Grove ..... Herefords.
McLean, Mrs. Ann, Riverside ..... Shorthorns.
McLean, Hugh, Wyoming ..... Shorthorns.
McLeish, J., & Sons, Keyser ..... Shorthorns.
McLeod, W. D., Kirkhill ..... Ayrshires.
McLeod, John D., Moose Creek ..... Ayrshires.

MEMBERS OF DOMINION CATTLE BREEDERS' ASSOCIATION, 1907 AND 1908.—*Continued.*

Name and Address	Breed
McLeod, A. E., Bracebridge	Shorthorns.
McMahon, A. & J., Wyoming	Shorthorns.
McManus, Dr., Blackville, N. B.	Ayrshires.
McMaster, J. A., Summerstown	Ayrshires.
McMillan, D. E., Laggan	Ayrshires.
McMillan, D. P., Alexandria	Ayrshires.
McMillan, Alex. J., Brocksden	Shorthorns.
McMillan, D., Guelph	Shorthorns.
McMillan, Jos., Shakespeare	Shorthorns.
McNabb, A. K., Glenarm	Shorthorns.
McNabb, M., Lawrence Station	Shorthorns.
McNab, John, Rockwood	Shorthorns.
McNaught, Robt., Parry Sound	Shorthorns.
McNeil, C. A., Wilstead	Holstein-Friesians.
McNeill, J. & C., Cavan	Shorthorns.
McNulty, Mrs., Rathburn	Shorthorns.
McOnat, Jas., Brownsburg, Que	Ayrshires.
McPhail, Dougall, Sonya	Shorthorns.
McPhail, Dr., Manilla	Shorthorns.
McPhater, J. S. A., Clyde	Shorthorns.
McPherson, Hugh, Calder	Shorthorns.
McPherson, Jas., Dundalk	Shorthorns.
McPherson, Wm. & Sons, Arkona	Shorthorns.
McQueen, Donald, Conn	Shorthorns.
McQueen, T. W., Tillsonburg	Holstein-Friesians.
McRae, Dan'l K., Strathburn	Shorthorns.
McRae, John, Teeswater	Shorthorns.
McTaggart, Alex., Sonya	Shorthorns.
McTavish, Alex., Shakespeare	Shorthorns.
McVey, Robt. W., Devizes	Shorthorns.
McVittie, Albert, Meaford	Shorthorns.
McWilliams, A. & W., Clandeboye	Shorthorns.
Naismith, D. M., Holstein	Shorthorns.
Neeb, Jacob, Brocksden	Shorthorns.
Neil, F. H. & Son, Lucan	Shorthorns.
Nesbitt, John, Fallowfield	Shorthorns.
Nesbitt, W. H., Roland, Man	Ayrshires.
Ness, D. T., Howick, Que	Ayrshires.
Ness, R. R., Howick, Que	Ayrshires.
Ness, Robt., Howick, Que	Ayrshires.
Newman, Thomas., Calgary, Alta	Ayrshires.
Newton, J. L., Chapman	Ayrshires.
Nichol, Robt., Hagersville	Shorthorns.
Nichols, Ira, Norwich	Holstein-Friesians.
Nicholson, R. & S., Sylvan	Shorthorns.
Nixon, Wm. L., Ingersoll	Holstein-Friesians.
Nixon, Howden, Ingersoll	Holstein-Friesians.
Noble, Robt., Norval	Shorthorns.
Norman, Wm., Thornhill	Holstein-Freisians.
Norris, Mrs. John, Ravenshoe	Shorthorns.
Norris, Robt., Staffa	Shorthorns.
Norrish, John Y., Nassagaweya	Shorthorns.
North, Geo., Marden	Holstein-Friesians.
Nott, W. J., MacLennan	Shorthorns.
Nugent, Joseph, Lorneville	Shorthorns.
Oberle, Xavier, Carlsruhe	Shorthorns.
O'Brien, Wm., Downeyville	Shorthorns.
Ogilvie Estate, W. W., Lachine Rapids, Que.	Ayrshires.
Oke, G. H., Alvinston	Shorthorns.
Oliver, Geo., Galt	Shorthorns.
Oliver, Geo., Bright	Holstein-Friesians.
Ontario Agricultural College, Guelph	Shorthorns, Herefords, Ayrshires.
O'Neill Bros., Southgate	Herefords.
Oppertshauser, N., Hanover	Aberdeen-Angus.
Ormiston, Wm., jr., Columbus	Shorthorns.
Ormiston, Wm. J., Enfield	Shorthorns.
Osborne, J. F., Bowmanville	Shorthorns.
Ostrander, Lemuel, Reddickville	Shorthorns.
Ostrander, Thos. S., Reddickville	Shorthorns.
Ouimet, Wilfred, St. Rose, Que	Ayrshires.
Owens, Hon. Wm., Dorchester st., W., Montreal, Que.	Ayrshires.
Owens, S., Antrim	Ayrshires.
Oxley, Chas., Canfield	Shorthorns.
Pagot, John, Sundridge	Shorthorns.
Pardo, E. L. & Sons, Cedar Springs	Shorthorns.
Paria, J. E., Harrisville, N. B.	Ayrshires.
Parker, Mrs. Wm. & Sons, Wyebridge	Shorthorns.
Parker, W. D., Hatley, Que.	Ayrshires.
Parkinson, E., Eramosa	Shorthorns.
Parkinson, E. H., Thornbury	Shorthorns.

Parlee, H. S., Sussex, N. B.....Ayrshires.
Parlee, M. H., Sussex, N. B.....Ayrshires.
Parish, John, Leaskdale.....Shorthorns.
Parsons, J. L., Whitby.....Shorthorns.
Parsons, J. F., & Sons, Barnston, Que.....Ayrshires.
Palmer, B. J., New Durham.....Holstein-Friesians.
Palmer, Oswald, Lacombe, Alta.....Herefords.
Palmer, Geo. R., Summerstown.....Ayrshires.
Pannabacker, E., Hespeler.....Holstein-Friesians.
Parkinson, G. & W., Eramosa.....Shorthorns.
Pascoe, Wm., & A. R., Cedar Dale.....Shorthorns.
Paterson Bros., Millbrook.....Shorthorns.
Paterson, Wm., Hillsdale.....Shorthorns.
Paterson, Wm., & Sons, Almonte.....Shorthorns.
Paterson, T. G., Rayside.....Holstein-Friesians.
Patrick, E. W., Ilderton.....Shorthorns.
Patten, J. H., Paris.....Holstein-Friesians.
Patten, Walter, St. George.....Holstein-Friesians.
Patterson, J. S., Amulee.....Shorthorns.
Patton, J. A., Rockland.....Herefords.
Payne, J. C., Dutton.....Shorthorns.
Payne, N., Cobourg.....Shorthorns.
Peacock, Grace E., Mt. Salem.....Holstein-Friesians.
Pearce, Arthur, Cornell.....Holstein-Friesians.
Pearce, W. M., Tilsonburg.....Holstein-Friesians.
Pearson, S. J., & Son, Meadowvale.....Shorthorns.
Peat, Thos., Bright.....Shorthorns.
Penhall, R. A., St. Thomas.....Holstein-Friesians.
Penhall, R. J., Nober.....Herefords.
Pepper, John, Hensall.....Shorthorns.
Percival, G. W., Glen Buell.....Ayrshires.
Perdue, H. T., Wingham.....Herefords.
Pettes, John M., West Brome, Que.....Ayrshires.
Pettigrew, Henry, Norval.....Shorthorns.
Pettit, A. C., Freeman.....Shorthorns.
Pettit, F. C., Burgessville.....Holstein-Friesians.
Pettit, F. E., Burgessville.....Holstein-Friesians.
Pettit, W. G., & Sons, Freeman.....Shorthorns.
Pfeffer, John, Dexter.....Shorthorns.
Phaneuf, Antoine, St. Antoine Vercheres, Que..Ayrshires.
Phoenix Bros., Primrose.....Shorthorns.
Phillips, W. J., Dromore.....Shorthorns.
Philp, W. A., Penryn.....Holstein-Friesians.
Pinkerton, R. B., Essex.....Shorthorns.
Pletsch, Adam, Alsfeldt.....Shorthorns.

Plumstead, Henry, Clinton.....Shorthorns.
Pollard, Geo., Orono.....Shorthorns.
Pollard, John & Sons, Iona Station.....Shorthorns.
Pollock, Wm., Seagrave.....Shorthorns.
Poole, Chauncey, Norwich.....Holstein-Friesians.
Poole, Samuel, Norwich.....Holstein-Friesians.
Pope, J. C., Regina, Sask.....Ayrshires.
Porter, Chas. E., Lloydtown.....Shorthorns.
Porter Bros., Applehy.....Shorthorns.
Potter, John, Lieury.....Shorthorns.
Pound, Wm. F., Bayham.....Holstein-Friesians.
Powell, L. B., Wallenstein.....Shorthorns.
Preston, Robt. D., Leamington.....Shorthorns.
Preston, A. J., Athens.....Holstein-Friesians.
Prevest, Felix, Varennes, Que.....Ayrshires.
Priddis Bros., London.....Shorthorns.
Proulx, Felix, St. Ours, Que.....Ayrshires.
Prouse, G. T., Ostrander.....Holstein-Friesians.
Prouse, Wm., Dereham Centre.....Holstein-Friesians.
Prouse, Thos., Dereham Centre.....Holstein-Friesians.
Prout, Geo. W., Zephyr.....Shorthorns.
Provincial Farm, Charlottetown, P.E.I.....Ayrshires.
Pugh, Ed., E., Claremont.....Shorthorns.
Pugh, Wm. D., Claremont.....Shorthorns.
Purdy, D. A., Lumsden, Sask.....Herefords.
Purves, Albert, Craigvale.....Shorthorns.
Purves Bros., Lucknow.....Shorthorns.
Quadd, Fred, Dunlop.....Herefords.
Quick, C. H., Leamington.....Shorthorns.
Raethke, Chas., Three Hills, Alta.....Herefords.
Raikes, Geo., Barrie.....Shorthorns.
Ramsay, Geo. M., Byng.....Shorthorns.
Randall, J. & Son, Highgate.....Herefords.
Rankin, Chas., Wyebridge.....Shorthorns.
Rannie, Wm., Menie.....Ayrshires.
Rattie, Jos., St. Augustine, Que.....Ayrshires.
Rawlings, Fred, Forest.....Shorthorns.
Raymond, Oliver, Dickinson's Landing.....Ayrshires.
Real, Geo., Greenbank.....Shorthorns.
Redmond, S. F., Peterboro.....Shorthorns.
Redmond, Thos., Millbrook.....Shorthorns.
Redmond, Wm. & Sons, Port Perry.....Shorthorns.
Reed, J. W., Olds, Alta.....Herefords.
Reed, H., Mimosa.....Herefords.
Reid, John H., Moosomin, Sask.....Herefords.

MEMBERS OF DOMINION CATTLE BREEDERS' ASSOCIATION, 1907 AND 1908.—*Continued.*

Name and Address	Breed
Reid, D. D., Canora, Sask	Herefords.
Reid & Co., Hintonburg	Ayrshires.
Reid, David, Walter's Falls	Shorthorns.
Reid, R. F., Georgetown	Shorthorns.
Reid, R. H., Pine River	Shorthorns.
Reid, W. H., Kingston	Shorthorns.
Reist, I. & G., Kossuth	Shorthorns.
Rennie, Mrs. John, Teviotdale	Shorthorns.
Rennelson, Richard, Galt	Shorthorns.
Rettie, Jas., Norwich	Holstein-Friesians.
Reycraft, T. C., Highgate	Shorthorns.
Reynolds, Wm. E. & Son, Uxbridge	Shorthorns.
Rice, Alfred, Currie's	Holstein-Friesians.
Rice, Geo., Tillsonburg	Holstein-Friesians.
Richard, Samuel, Bowmanville	Shorthorns.
Richardson, Andrew, Peepabun	Shorthorns.
Richardson, Fred, Columbus	Short orns.
Richardson, J. & Son, Lnton	Shorthorns.
Richardson, J. J., Markdale	Shorthorns.
Richardson, J. W., Caledonia	Holstein-Friesians.
Richardson, Matt., Caledonia	Holstein-Friesians.
Richardson, F. R., Billing's Bridge	——— .
Richie, W. L., Saurin	Herefords.
Riddle, Jas., Beeton	Shorthorns.
Ridley, Geo. H., St. Mary's	Shorthorns.
Riel, J. B., St. Remi, Que	Ayrshires.
Rife, David, Hespeler	Holstein-Friesians.
Ripley, H., Elgin	Holstein-Friesians.
Risely, E. E., Bridgeburg	Shorthorns.
Ritchie, W. L., Saurin	Herefords.
Rivers, Walburn, Foldens	Holstein-Friesians.
Rivet, Chas., Joliette, Que	Ayrshires.
Roach, J. F., Sussex, N.B.	Ayrshires.
Robbins, Collver V., Wellandport	Holstein-Friesians.
Roberts, W. B. & T. H., Sparta	Shorthorns.
Robertson, A. W., Nithburg	Shorthorns.
Robertson, John, Wyoming	Shorthorns.
Robertson, Lieut.-Col. D. M., Toronto	Shorthorns.
Robertson, N. S., Aruprior	Shorthorns.
Robertson, Robt., Oil Springs	Shorthorns.
Robertson, Adam, Como, Que	Ayrshires.
Robertson, W. C., Annan	Shorthorns
Robertson, W. D., Oakville	Shorthorns.
Robertson, David, M.D., Milton	Holstein-Friesians.
Robinson, Ed., Markham	Shorthorns.
Robinson, Mrs. J. W., St. Mary's	Shorthorns.
Robinson, John & Son, Newton Robinson	Shorthorns.
Robinson, Lorenzo, Barrie	Shorthorns.
Robinson, T. & Son, Dunsford	Aberdeen-Angus.
Robinson, A. E., Markham	Holstein-Friesians.
Robinson, Chas., South Mountain	Holstein-Friesians.
Robson, J. G., Ilderton	Shorthorns.
Robson, Robt., Ashburn	Shorthorns.
Robson, Capt. T. E., London	Shorthorns.
Rock, John, Springford	Shorthorns.
Rogers, Jos. & Sons, Kettleby	Shorthorns.
Rogers, Wm., Mitchell	Shorthorns.
Rollings, Wm., Gibraltar	Shorthorns.
Rooke, Geo., Dereham Centre	Holstein-Friesians.
Rosebrugh, Harry, St. George	Holstein-Friesians.
Ross, Bros., Nairn	Shorthorns.
Ross, J. C., Jarvis	Shorthorns.
Rothwell, B., Ottawa	Ayrshires.
Roulston, Geo. W., Evelyn	Ayrshires.
Row, Fred, Curries	Holstein-Friesians.
Rowe, Hy., Exeter	Shorthorns.
Rudd, C. C., Eden Mills	Devons.
Rusnell, D. H., Stouffville	Shorthorns.
Russell, Thos., Exeter	Shorthorns.
Russell, Thos., Cannington	Shorthorns.
Ruston, F. & Sons, Sebringville	Shorthorns.
Rutherford, Wm., South Monaghan	Shorthorns.
Ryckman, Geo. W., McNab	Shorthorns.
Safford, W. R., Sutton Junction, Que	Ayrshires.
Salkeld, Isaac, Goderich	Shorthorns.
Salkeld, John W., Goderich	Shorthorns.
Sanborn, F. & Son, South Roxton, Que	Ayrshires.
Sanders, W. G. & Sons, St. Thomas	Shorthorns.
Sanderson, Matthew, Wroxeter	Shorthorns.
Sandilands, John, Williamstown	Ayrshires.
Sang, Chas. J., Chippawa Hill	Shorthorns.
Saunders, Isaac, Morden, Man	Herefords.

Scarfe, Thos. & Sons, Rocky Saugeen.....Shorthorns.
Scarf, Wm., Grand Valley.....Shorthorns.
Schell, Walter S., Woodstock.....Holstein-Friesians.
Schellenberger, Peter, Sebringville.....Shorthorns.
Schiefele, A. W., Hiedelberg.....Holstein-Friesians.
Schiefele, C., St. Jacobs.....Shorthorns.
Schnider, W. & H., Gowanstown.....Shorthorns.
Schmidt, A. D., Elmira.....Shorthorns.
Scobie, T. & Co., Manotick.....Shorthorns.
Schofield, E. Allan, St. John, N.B.....Ayrshires.
Scott, F. W., Highgate.....Shorthorns.
Scott, John, Dunblane.....Shorthorns.
Scott, John, Atha.....Shorthorns.
Scott, Thos. & Sons, Sutton West.....Shorthorns.
Scott, Wm., Claremont.....Shorthorns.
Scott, Wm. S., Tillsonburg.....Shorthorns.
Scott, W. W., Highgate.....Shorthorns.
Sealy Bros., Bunessan.....Shorthorns.
Secord, Jas. R. R., Homer.....Shorthorns.
Seminaire St. Therese, St. Therese, Que.....Ayrshires.
Semple, Hugh, Hereward.....Shorthorns.
Senn, John, York.....Shorthorns.
Shand, G. H. & J., Port Dover.....Shorthorns.
Shannon Bros., Arnprior.....Herefords.
Shantz, Aaron, Haysville.....Shorthorns.
Shantz, Herman, Baden.....Shorthorns.
Shantz, Solomon, Haysville.....Shorthorns.
Shantz, Til. S., Waterloo.....Shorthorns.
Sharman, Jos., Russell, Man.....Herefords.
Sharp, Jas., Rockside.....Aberdeen-Angus.
Shaver, Alf. M., Ancaster.....Shorthorns.
Shaw, A. J. C. & Sons, Thamesville.....Shorthorns.
Shaw, J. W., Hawkestone.....Shorthorns.
Shaw, Thos., Wildfield.....Shorthorns.
Shaw, W. A., Foxboro.....Holstein-Friesians.
Shean, W. E., Elmbank.....Shorthorns.
Shean, W. J. & Co., Owen Sound.....Shorthorns.
Shearer, Wm. S., Listowel.....Holstein-Friesians.
Shelby, Levi R., Union.....Shorthorns.
Shellington, Robt., Harley.....Holstein-Friesians.
Sheppard, Geo. & Son, Primrose.....Shorthorns.
Sheriff, W. & G. G., Clarence.....Ayrshires.
Shibley, Jacob E., Harrowsmith.....Shorthorns.
Shields, Wm., Brandon, Man.....Herefords.
Shilling, Louis, Elmwood.....Shorthorns

Shobbrook, Jas., Londesborough.....Shorthorns.
Shore, D. H., Thornbury.....Shorthorns.
Shouldice, Jas., Gleichen, Alta.....Herefords.
Shuttleworth, H. P., Ingersoll.....Holstein-Friesians.
Sibbald, Miss E. K., Sutton West.....Shorthorns.
Sifton, Chas., Cairngorm.....Holstein-Friesians.
Sillery, Richard, Staffa.....Shorthorns.
Silverthorn, Chas., Summerville.....Shorthorns.
Simmons Bros., Charlottetown, P.E.I.....Ayrshires.
Simmons, C.M., Ivan.....Shorthorns.
Simmons, W. H., New Durham.....Holstein-Friesians.
Simms, A. Haig, Montreal, Que.....Ayrshires.
Simpson, F. George, Morpeth.....Shorthorns.
Simpson, G. H., Peterborough.....Shorthorns.
Simpson, Jas., South Augusta.....Ayrshires.
Simpson, Jas., Moffatt.....Shorthorns.
Sims, Edwin, Woodroyd, Man.....Herefords.
Sinclair, Duncan, Keady.....Shorthorns.
Sinclair, Geo. H., Langbank.....Shorthorns.
Sinclair, Thomas B., Brigden.....Holstein-Friesians.
Sinton, Robt., Regina, Sask.....Herefords.
Skeoch, Jas., Corunna.....Shorthorns.
Skeoch, R. M., Box 508, Sarnia.....Shorthorns.
Skippon, Thos., Hyde Park.....Herefords.
Slaght, Wm., Bealton.....Holstein-Friesians.
Slimmon, W. W., Glen Allan.....Shorthorns.
Sloper, Wm., Cobourg.....Ayrshires.
Smiley, S. H., St. Thomas.....Holstein-Friesians.
Smillie, A. G., Hensall.....Shorthorns.
Smith, Amos, Trowbridge.....Shorthorns.
Smith, Arthur, Sparta.....Shorthorns.
Smith, Arthur, York.....Shorthorns.
Smith, A. L., Fairfield Plains.....Shorthorns.
Smith, A. W., Maple Lodge.....Shorthorns.
Smith Bros., Meaford.....Shorthorns.
Smith, C. E., Scotland.....Holstein-Friesians.
Smith, C. John, Madoc.....Holstein-Friesians.
Smith, D. & Sons, Belmont.....Shorthorns.
Smith, D. & Sons, Smithdale.....Shorthorns.
Smith, F. A., Grovesend.....Shorthorns.
Smith, Frank W., Scotland.....Shorthorns
Smith, Fred., Brandon, Man.....Herefords.
Smith, G. W., Dundas.....Holstein-Friesians.
Smith, Gordon, South Woodslee.....Shorthorns.
Smith, Harry, Exeter.....Shorthorns.

MEMBERS OF DOMINION CATTLE BREEDERS' ASSOCIATION, 1907 AND 1908.—*Continued.*

Name and Address	Breed
Smith, H. D., Hamilton	Herefords.
Smith, John, Conover	Shorthorns.
Smith John & Sons, Duntroon	Shorthorns.
Smith, Samuel, Walkerton	Shorthorns.
Smith, J. J., Enniskillen	Shorthorns.
Smith, Wm., Columbus	Shorthorns.
Smith, W. M., Scotland	Ayrshires.
Smith, Wm. C., Burgessville	Holstein-Friesians.
Smith, Wm. & Sons, Duntroon	Shorthorns.
Smyth, Henry, Fernlee	Shorthorns.
Smyth, Harry R., Kent Centre	Shorthorns.
Smyth, Robt. L., Fargo	Shorthorns.
Snary, J. H. & F., Croton	Shorthorns.
Snell, Geo., Reddickville	Shorthorns.
Snell, Geo., Yeovil	Shorthorns.
Snell, H. M., Londesboro	Shorthorns.
Snell, Jas., Clinton	Shorthorns.
Snell, Wm., Londesboro	Shorthorns.
Snider, Peter A., Bloomingdale	Shorthorns.
Snyder, Elias, Burgessville	Holstein-Friesians.
Snyder, J. S., Bridgeport	Shorthorns.
Snyder, Jos. B., Waterloo	Shorthorns.
Sockett, John, Rockwood	Shorthorns.
Somerville, R. & Sons, Elder's Mills	Shorthorns.
Spafford, Robt., Bethesda	Shorthorns.
Sparham, Geo. E., Morpeth	Shorthorns.
Sparrow, R. C. & Sons, Antrim	Shorthorns.
Spiers, Jas., Brussels	Shorthorns.
Sprague, John B., Keswick	Shorthorns.
Spratt, T. A., Billing's Bridge	Holstein-Friesians.
Sproule, T. S., M.P., Markdale	Shorthorns.
Srigley, John & Sons, Allandale	Shorthorns.
Stafford, Chas., Flesherton	Shorthorns.
Stalker, John, Acton	Shorthorns.
Stanton, Chas., Springford	Holstein-Friesians.
Staples, F. M., Millbrook	Shorthorns.
Staples, Geo., Lifford	Shorthorns.
Staples, Rd. & Sons, Lifford	Shorthorns.
Stauffer, Well., Ringwood	Shorthorns.
Steacy, R. G., Brockville	Ayrshires.
Stead, Henry, Thamesville	Shorthorns.
Steele, Jas., Lochalsh	Shorthorns.
Steele, W. J., Newington	Ayrshires.
Steele Bros., Glenboro, Man	Ayrshires.
Steen, N. A., Meadowvale	Shorthorns.
Stevenson, W. H., Fenelon Falls	Shorthorns.
Stephen, John, Fenelon Falls	Shorthorns.
Stephen, W. F., Huntingdon, Que	Ayrshires
Stephens, Byron, Brigden	Holstein-Friesians.
Stevens, Thos., Morpeth	Shorthorns.
Stevens, Wm. C., Phillipsville	Holstein-Friesians.
Stevenson, R. S., Ancaster	Holstein-Friesians.
Stewart, A. A., Clyde	Shorthorns.
Stewart, Fred., Elfrida	Holstein-Friesians.
Stewart, Jas. A., Menie	Ayrshires.
Stewart, John, Gorrie	Shorthorns.
Stewart, T. A., Hemmingford, Que	Ayrshires.
Stewart, J. W., Lyn	Holstein-Friesians.
Stewart, Peter, Everton	Shorthorns.
Stewart, Wm., Menie	Ayrshires.
Stillman, Robt., Campbellford	Holstein-Friesians.
Stiver, Byron, Mt. Albert	Shorthorns.
Stobbart, Thos., Highfield	Shorthorns.
Stock, C. J., Tavistock	Shorthorns.
Stock, Jas. & Sons, Columbus	Shorthorns.
Stokes, John, Tweed	Ayrshires.
Stone, Alfred, Guelph	Herefords.
Stone, Jos., Saintfield	Shorthorns.
Stone, R., Uptergrove	Shorthorns.
Storey, Walter, Alma	Shorthorns.
Stott, Geo., Wyevale	Shorthorns.
Stoutenburg, Arthur, Banks	Shorthorns.
Straus, M. & Sons, Bamberg	Shorthorns.
Stringer, Abe., Kingarf	Shorthorns.
Strobridge, Frank, Thamesford	Holstein-Friesians.
Stroud, Thos., Tillsonburg	Holstein-Friesians.
Sturgeon, R. I., Manhard	Holstein-Friesians.
Struthers, R. & W. B., Poole	Shorthorns.
Stutt, R. W., Forest	Herefords.
Suddaby, Milton, Heckston	Ayrshires.
Suhring, Otto, Sebringville	Holstein-Friesians.
Suhring, Wm., Sebringville	Holstein-Friesians.

Summerfeldt, L., Unionville.....Holstein-Friesians.
Surtees, W. R., Clarence.....Shorthorns.
Sutherland, Wm. M., Walter's Falls.....Shorthorns.
Sutton, J. W., Ospringe.....Shorthorns.
Sutton, M., Cavan.....Shorthorns.
Sutton, Mark, Ospringe.....Shorthorns.
Swan, John A., Vasey.....Shorthorns.
Swance, B., Tillsonburg.....Holstein-Friesians.
Sweet, Thos., Exeter.....Shorthorns.
Tackell, Wm., Zenda.....Holstein-Friesians.
Talbot, Daniel & Sons, Everton.....Shorthorns.
Tamblyn, John W., Londesboro.....Shorthorns.
Tanner, Jas. & John, Walkerton.....Shorthorns.
Tapley, W. F., Norwich.....Holstein-Friesians.
Taylor, F. W., Wellman's Corners.....Ayrshires.
Taylor, J. H., Scotland.....Holstein-Friesians.
Taylor, David H., Corwhin.....Shorthorns.
Taylor, John A., Poplar.....Shorthorns.
Taylor, Thos. H., Belgrave.....Shorthorns.
Taylor, W. H., Evelyn.....Shorthorns.
Taylor, W. H. & Son, Parkhill.....Shorthorns.
Teeple, A. H., Curries.....Holstein-Friesians.
Teeter, Frederick, Wallaceburg.....Shorthorns.
Telfer, Thos. G., Ingersoll.....Holstein-Friesians.
Thibeadeau, Damase, Thurso, Que.....Ayrshires.
Thom, John, Walter's Falls.....Shorthorns.
Thompson, A. J., Hoards.....Holstein-Friesians.
Thompson, Jos. A., South Lake.....Holstein-Friesians.
Thompson, And., Chesley.....Shorthorns.
Thompson, Jos. H., Ospringe.....Shorthorns.
Thompson, Nath., Orangeville.....Shorthorns.
Thompson, R. & W. J., Spiers.....Shorthorns.
Thompson, Thos. H., Gore Bay.....Shorthorns.
Thompson, W. J., Mitchell.....Shorthorns.
Thoms, John, Clay Bank.....Shorthorns.
Thomson, A. R., Stamford.....Shorthorns.
Thomson, Jas., Mildmay.....Shorthorns.
Thomson, Malcolm, Walkerton.....Shorthorns.
Thomson, W. P., Thamesford.....Shorthorns.
Thomson, Peter, Grand Valley.....Shorthorns.
Thomson, Thos., Headford.....Shorthorns.
Thomson, W. B., Fergus.....Shorthorns.
Thomson, Wm. E., Woodstock.....Holstein-Friesians.
Thomson, A. J., Erin.....Aberdeen-Angus.
Thomson, P. A., Hillsburg.....Aberdeen-Angus.

Thorn, W., Lyndoch.....Ayrshires.
Tindall, Robt., Fergus.....Shorthorns.
Tipping, J. A., Clarenceville, Que.....Ayrshires.
Todd, Thos., St. Helens.....Shorthorns.
Tolchard, Geo., Chesley.....Shorthorns.
Tolton, A., Waldemar.....Shorthorns.
Tolton, Jas. M., Walkerton.....Shorthorns.
Toole, J. W., Whitevale.....Shorthorns.
Torrance, Peter, Lucknow.....Shorthorns.
Tough, Jas., Edmonton, Alta.....Herefords.
Tourigney, Paul, Victoriaville, Que.....Ayrshires.
Tran, W. H., Cedar Grove.....Ayrshires.
Trappiste Fathers, La Trappe, Oka, Que.....Ayrshires.
Treffry, W. J., Hawtrey.....Holstein-Friesians.
Tremblay, Art. Achilles, Les Eboulements, Que.....Ayrshires.
Trestain, John & Sons, Strathburn.....Shorthorns.
Treverton, T. C., Poucher's Mills.....Ayrshires.
Trick, John, Cresswell.....Shorthorns.
Trott, Ed. & Sons, Christina.....Shorthorns.
Trudell, T., St. Prosper, Que.....Ayrshires.
Tuck, John, Mosboro.....Shorthorns.
Tuck, John & Sons, Waterdown.....Shorthorns.
Tucker, Geo., Drayton.....Shorthorns.
Tucker, John, Arthur.....Shorthorns.
Tufts, Wallace, Welland.....Shorthorns.
Tupling, Alex. & Sons, Honeywood.....Shorthorns.
Turenne, Delphis, St. Paul l'Ermite, Que.....Ayrshires.
Turnbull, Wm. & Sons, Cowanston.....Shorthorns.
Turner, D. S., Whitevale.....Shorthorns.
Turner, J. Fred, Hillsdale.....Shorthorns.
Tyler, T. G., Abercorn, Que.....Ayrshires.
Umbach, Samuel, Elmira.....Shorthorns.
Usher, Hudson, Queenston.....Shorthorns.
Vanderlip, H. M., Cainsville.....Shorthorns.
VanNatter, Ira B, Ballinafad.....Shorthorns.
VanPatter, J. M., Luton.....Holstein-Friesians.
Varco, John, Carlow.....Aberdeen-Angus.
Varden, F. W., Springford.....Shorthorns.
Wagar, C. D., Enterprise.....Shorthorns.
Wagler, C., Baden.....Holstein-Friesians.
Wakely, F. J., Bolton.....Shorthorns.
Wakely, Louis A., Bolton.....Shorthorns.
Waldie, Alex., Acton.....Shorthorns.
Waldie, Wm., Stratford.....Shorthorns.
Walker Sons, Walkerville.....Shorthorns.

MEMBERS OF DOMINION CATTLE BREEDERS' ASSOCIATION, 1907 AND 1908.—*Concluded.*

Name and Address	Breed
Walker, Chas. E., Norwich	Holstein-Friesians.
Walker, Wm., Carluke	Holstein-Friesians.
Walker, A. T., Beaconsfield	Holstein-Friesians.
Walker, R. W., Utica	Holstein-Friesians.
Wallace, J. Alex., Simcoe	Holstein-Friesians.
Wallace, Jeremiah, Jr., Shanly	Holstein-Friesians.
Wallace, Jos. T,, Aberdour	Shorthorns.
Wallace, W. A., Kars	Shorthorns.
Wallace, W. H. & Sons, Mount Forest	Shorthorns.
Wallbrook, Wm., Hagersville	Shorthorns.
Walls, John, Clifford	Shorthorns.
Walters, John, Saltford	Shorthorns.
Ward, Ed., Greenbank	Shorthorns.
Ward, E. & Sons, Kilmanagh	Shorthorns.
Ward, Richard, Balsam	Shorthorns.
Ward, W. J., Woodhill	Shorthorns.
Ward, R. G., Springvale	Holstein-Friesians.
Wardell, W. E., Middlemarch	Shorthorns.
Warring, J. Edward, Newark	Holstein-Friesians.
Warnica, Asa., Painswick	Herefords.
Warnica, F. M., Painswick	Shorthorns.
Warren, J. L., Acton	Shorthorns.
Watson, A. J., Castlederg	Shorthorns.
Watson, John, Seagrave	Shorthorns.
Watson, Thos., Bolton	Shorthorns.
Watson, W. J., Malton	Shorthorns.
Watt, John & Son, Salem	Shorthorns.
Watt, D. M., Allen's Corners, Que.	Ayrshires.
Watt, J. A., Salem	Shorthorns.
Watts, Thos., Holt	Shorthorns.
Webb, Benj., Stroud	Shorthorns.
Weber, John, New Hamburg	Shorthorns.
Weber, M., Waterloo	Shorthorns.
Weber, Eph., Elmira	Shorthorns.
Weber, W. H., Lakelet	Shorthorns.
Webster, Mrs. M. J., Fingerboard	Shorthorns.
Webster, D. M., Athens	Holstein-Friesians.
Weekes, Geo., Glanworth	Shorthorns.
Weiks, August, Tavistock	Shorthorns.
Weir, A., Masonville	Shorthorns.
Weir, W. B., Crumlin	Shorthorns.
Weitzell, John W., Cassel	Shorthorns.
Weller, Albert, Zephyr	Shorthorns.
Weller, A. E., Kingston Junction	Holstein-Friesians.
Wells, A. C. & Sons, Sardis, B.C.	Ayrshires.
Welsh, Henry, Weston	Holstein-Friesians.
Westover, O. L., Luton	Shorthorns.
Whaley, Wm., North Seneca	Shorthorns.
Wheeler, Geo., Mimosa	Shorthorns.
Whelan, Mrs. J. H., Westport	Ayrshires.
White, Peter, Pembroke	Shorthorns.
White, Dan'l, Brickley	Shorthorns.
Whitehead, E. R., Montmorency Falls, Que.	Ayrshires.
Whitelaw, A. & W., Guelph	Shorthorns.
Whitson, John, Atha	Shorthorns.
Whitson, Robt., Atha	Shorthorns.
Whittaker & Sons, H. J., Williamsburg	Ayrshires.
Whyte, G. H., Clifford	Aberdeen-Angus.
Wideman, M., St. Jacobs	Shorthorns.
Widdicfield, J. W., Uxbridge	Shorthorns.
Wiley, A. S., Wisbeach	Shorthorns.
Wiley, Jas., Wisbeach	Shorthorns.
Wiley, Wm. T., Tara	Shorthorns.
Wilken, Jas., Balsam	Shorthorns.
Wilkinson, J. C., Warwick West	Shorthorns.
Will, John, Fort Covington, N. Y.	Ayrshires.
Williams, A. W., Port Perry	Shorthorns.
Williams, Richard, Craighurst	Shorthorns.
Williams, Louis, North Ridge	Ayrshires.
Williams, Chas., Ostrander	Holstein-Friesians.
Willis, Jr., R., Aylmer	Holstein-Friesians.
Willmott, F. C., Milton	Shorthorns.
Willson., Ed., & Son, Brougham	Shorthorns.
Wilson, Geo. T., Balsam	Shorthorns.
Wilson, John L., Gorrie	Shorthorns.
Wilson, John & Son, Green River	Shorthorns.
Wilson, N. F., Cumberland	Shorthorns.
Wilson, Richard, Lifford	Shorthorns.
Wilson, W. A., Lucknow	Shorthorns.
Wilson, Wm. & Son, Brickley	Shorthorns.
Wilson, Wm. C., Hawkestone	Shorthorns.
Wilson, J. Lockie, Toronto	Ayrshires.

Wiltse, Ford B., Athens	Holstein-Friesians.
Wise, Ed. H., Clinton	Shorthorns.
Wise, John, St. Thomas	Shorthorns.
Wood, Andrew, McAlpin	Ayrshires.
Wood, Walter J., Shorthills, N.W.T.	Ayrshires.
Wood, J. A., Genoa, Que.	Ayrshires.
Wood, Jas. S., Mount Forest	Shorthorns.
Woodisee Bros., Rothsay	Ayrshires.
Woodley, Fred V., Boston	Holstein-Friesians.
Woodley, Elmer V., Waterford	Holstein-Friesians.
Woods, John G., New Hamburg	Holstein-Friesians.
Woodley, Geo. L., Villa Nova	Holstein-Friesians.
Woolacott, J. & W., Kennicott	Shorthorns.
Wooley, John M. & Son, Petrolia	Shorthorns.
Wooley, D. McF., Simcoe	Ayrshires.
Woof, W. L., Hillier	Holstein-Friesians.
Worthy, Wm., Kincardine	Shorthorns.
Wren, Christopher, Uxbridge	Shorthorns.
Wright, Herbert, Guelph	Shorthorns.
Wright, John, Blackstock	Shorthorns.
Wright, Thos. A. & Son, Blackstock	Shorthorns.
Wyckoff, I. G., Tyrrell	Holstein-Friesians.
Yates, A., Athens	Ayrshires.
Yates, Mahlon, Athens	Ayrshires.
Young, Samuel, Guelph	Aberdeen-Angus.
Young Bros., Whitby	Shorthorns.
Young, Chas., Brooksdale	Shorthorns.
Young, Jas., Port Lock	Shorthorns.
Young, Wm., Waubuno	Shorthorns.
Young, Wm. A., Glanford	Shorthorns.
Ynill, A. C., Carleton Place	Ayrshires.
Zehr, Jos. L., Tavistock	Shorthorns.
Zoeller, A. M., New Hamburg	Holstein-Friesians.

MEMBERS OF DOMINION SHEEP BREEDERS' ASSOCIATION, 1907 AND 1908.

Name and Address	Breed
Alexander, Wm., Doe Lake	Oxfords.
Allison, Geo., Burbank, Man.	Leicesters.
Andrews, Geo., Millfield, Que.	Leicesters.
Arkell, Henry & Son, Arkell	Oxford Downs.
Armstrong, Jas., Shawville, Que.	Oxford Downs.
Armstrong, W. A., Shawville, Que.	Leicesters.
Armstrong, A. A., Minesing	Shropshires.
Arthur, Fred., Knowlton, Que.	Leicesters.
Bagshaw, W. A., Uxbridge	Cotswolds.
Baker, G. W. A., Trafalgar	Dorsets.
Baker, Geo., Simcoe	Southdowns.
Baldwin, H. E., Coaticook, Que	Leicesters.
Barber, Jno., Salem	———.
Barr, John, Blyth	———.
Bartlett, H., Smithville	Dorsets.
Bater Bros., Trafalgar	———.
Baxter, David, North Georgetown, Que.	Leicesters.
Beattie, Wm. J., Lemesurier, Que.	Leceisters.
Beaudoin, P. A., St. Blaise, Que.	Oxford Downs.
Bell, Robert, Hurondale	Leicesters.
Bellemare, Adrien, Yamachiche, Que	Leicesters.
Bellerose, Dephis, Ste. Elizabeth, Que.	Cotswolds.
Bergerson, Arthur, St. Pie, Que.	Leicesters.
Bolton, Jno., Guelph	———.
Booth, Geo. K., Melboro, Que.	Leicesters.
Boutet, Jas., Victoriaville, Que.	Leicesters.
Bourassa, Theo., Yamachiche, Que.	Leicesters.
Bowman, James, Guelph	Suffolks and Dorsets.
Boyd, A. J., Lacombe, Alta.	Oxford Downs.
Breen, J. F., Melancthon	Leicesters.
Brien, E. & Son, Ridgetown	Cotswolds.
Brisson, T., Howick, Que.	Leicesters.
Brohman, G. W., Brantford	———.
Brosseau, E. C., Brosseau Station, Que.	Oxford Downs.
Brown, David, St. Joachim, Que.	Leicesters.
Brown, A. & Son, Beachburg	Oxford Downs.
Brown, F. W., Portage La Prairie, Man.	Cotswolds.
Bryce, R. J., Dunedin	———.
Bryson, Jas., Brysonville, Que.	Leicesters.
Campbell, P. M., Balderson	Oxford Downs.
Campbell, Mac., Harwich	Leicesters.
Campbell, Jno., Woodville	Shropshires.
Campbell, Peter J., Breadalbane	Leicesters.
Carpenter, W. S., Simcoe	Shropshires.
Cavan, G. W., Box 1052, Toronto	Southdowns.
Central Experimental Farm, Ottawa	Shropshires and Dorset Horns.

MEMBERS OF DOMINION SHEEP BREEDERS' ASSOCIATION, 1907 AND 1908.—*Continued.*

Name and Address	Breed
Cerswell, J. A., Bond Head	Oxford Downs.
Chartier, Albert, St. Paul l'Ermite, Que.	Oxford Downs.
Christie, Peter, Manchester	Shropshires.
Cleland, Jas. R., Genoa, Que.	Leicesters.
Cloutier, N., Banlier de Trois Rivieres, Que.	Leicesters.
Cloutier, Jos., Riviere Aux Chiens, Que.	Leicesters.
Coke, James, Erin	Cotswolds.
Connell, Tim., Vine	Cotswolds.
Cote, C., Baie St. Paul, Que.	Leicesters.
Cousins, John & Son, Harriston	Oxford Downs.
Coutee, Pierre, St. Felix de Valois, Que.	Cotswolds.
Couter, T. E., Bathurst, N.B.	Leicesters.
Couture, Frances, St. Augustin, Que.	Leicesters.
Couture, Jos., Lorette, Que.	Leicesters.
Cowan, John S., Donegal	Leicesters.
Creighton, Robert, Genoa, Que.	———.
Crozier, A., Beachburg	Leicesters.
Cumming, D., Russell	Leicesters.
Davidson, J. D., Belhaven	Cotswolds.
Denis, Arsene, St. Norbert, Berthier, Que.	Shropshires, Lincolns, Leicesters, Cotswolds, Oxford Downs.
Descoteaux, J. F., St. Monique, Que.	Shropshires.
Dickenson, J. H., North Glanford.	Shropshires.
Douglas, Jas., Caledonia	Leicesters.
Dominion Experimental Farm, Nappan, N.S.	Leicesters.
Downey, Jas., Fordwich	Leicesters.
Drouin, Narcisse, St. Norbert, Que.	Leicesters.
Drummond, Sir Geo., Beaconsfield, Que.	Southdowns.
Dryden, Hon. John, Toronto	Shropshires.
Dryden, Wm., Brooklin	Shropshires.
Drysdale, Thos., Allan's Corners, Que.	Leicesters.
Dugas, Jos., Ruisslau St. Georges, Que.	Leicesters.
Dunn, J. A., Wooler	Cotswolds.
Dubour, Gideon, Baie St. Paul, Que.	Leicesters.
Duprie, Wilfred, Vercheres, Que.	Leicesters
Durham, W. H., Box 1052, Toronto	———.
Easton, Abram, Appleby	Leicesters.
Ecole d'Agriculture d'Oka, Oka, Que.	Shropshires.
Eddie, Hugh, Appin	———.
Edwards, Geo. B., Covey Hill, Que.	Leicesters.
Edwards, Nelson G., Clarence	Shropshires.
Ellard, Wright, Kazubazua, Que.	Leicesters.
Evans, D. & Son, Somenos, B. C.	Southdowns.
Ferland, M., St. Elizabeth, Que	Cotswolds.
Fitch, Val., Oriel	Cotswolds.
Fontaine, F., Notre Dame de Stanbridge, Que.	Leicesters.
Fortin, Joseph F., Baie St. Paul, Que.	Leicesters.
Fortin, Joseph B., Baie St. Paul, Que.	Leicesters.
Forster Farm, Oakville	Dorsets.
Frank, R. W., Kingsbury, Que.	Leicesters.
Frechette, Jos., St. Felix de Valois, Que.	Cotswolds.
Gamley, A. D., Griswold, Man.	Leicesters.
Garbutt, R. J., Belleville	Leicesters.
Garceau, Gideon, Point-du-Lac, Que	Leicesters.
Garceau, Phil., Point-du-Lac, Quebec.	Leicesters.
Gardhouse, J. & Sons, Highfield	Leicesters.
Gardhouse, J. M., Weston	Leicesters.
Gareau, J. J., St. Roch l'Achigan, Que.	Hampshires.
Gibson, J. T., Denfield	Lincolns.
Giffen, W. S., New Lowell	Dorsets.
Gilroy, John H., Coe Hill	Cotswolds.
Girouard, Pierre, St. Victoir de Richelieu, Que.	———.
Glass, Jas., Roxham, Que.	Leicesters.
Goodall, Wm., St. Louis de Gonzaque, Que.	Leicesters.
Gormley, Jas. & Son, Pickering	———.
Green, Geo., Fairview	———.
Green, Chas. G., South Bolton, Que.	Leicesters.
Guerard, Uldaige, St. Felix de Valois, Que.	Cotswolds.
Hadwen, G. H., Duncans, B. C.	Shropshires.
Hall, J. W., Bensfort	Leicesters.
Hanmer, J. G., Brantford	Shropshires.
Hanmer, D. G., Burford.	Shropshires.
Harding, R. H., Thorndale	Dorset Horns.
Hastings Bros., Crosshill	Leicesters.
Herbert, Bernard, St. Constant, Que.	Leicesters.
Hill, H., Londesboro	———.
Hine, Robert J., Dutton	Oxford Downs.
Hood, G. B., Guelph	Leicesters.
Hunter, Jno., Wyoming	Dorsets.
Ingram, Thos., Manitowaning	Cotswolds.
Innes, Donald, Tobique River, N.B.	Cotswolds.

Irving, A., Scotstown, Que.....Leicesters.
Jackson, John & Son, Abingdon .....Southdowns.
Jackson, T. S., Trafalgar.....Dorsets.
Jamieson, A. S., Jamieson, Que .....Leicesters.
Jeffs, E. & Son, Bond Head .....Southdowns & Leicesters.
Johnston, Arthur, Greenwood.....Cotswolds.
Johnston, Peter, Iverness, Que.....Leicesters.
Johnston Bros., Underwood.....Leicesters.
Johnston, Walt., Donegal .....Leicesters.
Jones, Wm., Zenda.....———.
Juneau, Edmond, St. Norbert, Que .....———.
Kelly, Jno., Shakespeare.....Hampshires, Leicesters.
Kemp, C. R., Hazledean .....Oxfords.
Kitchen, Washington, Copetown.....Oxfords.
Lachapelle, Napoleon, St. Paul l'Ermite, Que..Leicesters.
Lechapelle, Edouard, St. Paul, l'Ermite, Que..Leicesters & Cotswolds.
Lafontaine, Edouard, Plessisville, Que.... ....Leicesters.
Lalonde, C., St. Hermas, Que.....Leicesters.
Lamarche, H., St. Esprit, Que..... Leicesters.
Lamy, Adolph, St. Leon, Que. .....Leicesters.
Langmaid, W. J., Taunton.....Cotswolds.
Lavallee, Paul, Berthierville, Co. Berthier, Que.Cotswolds.
Lavallee, Louis, St. Guillaume, Que. .....———.
Lavinge, J. P., St. Gertrude, Que. .....Leicesters.
Lear, E., Blyth.....———.
Lee, J. W. & Son, Simcoe.....Oxfords.
Legis, Ulderic, St. Leon, Co. Maskinonge, Que.Shropshires.
Lemon, S., Kettleby.....———.
Letourneau, E., Ste. Famille, Ile d'Orleans, Que.Leicesters.
Levert, Nap., St. Benoit, Que..... .....Leicesters.
Lebel, Geo., French Village, Que. .....Leicesters.
Lloyd-Jones Bros., Burford .....Shropshires.
Loiselle, Jos., St. Marc, (Vercheres), Que.....———.
Loiselle, Ovide, St. Marc, Que.....———.
Luxton, A. G. H., Milton West .....Dorset Horns.
Lyons, S. J., Norval.....Cotswolds.
Lyster, C. N., Kirkdale, Que.....Leicesters.
Mackay, A. J., Macdonald, Man. .....Leicesters.
Malpas, Wm., Mossley .....Cotswolds.
Many, J. O., St. Sebastien, Que .....Leicesters.
Marshall, D. H., Snelgrove .....Cotswolds.
Martin, Toussaint, St. Laurent, Que.... .....Leicesters.
May, John, Melbourne, Que..... Leicesters.
Mahew, Orian, Canterbury, Que.....Leicesters.
Maynard, J. T., Chilliwack, B. C. .....Dorsets.

Meads, W. J., Ceylon .....Leicesters & Oxford Downs.
Middleton, C. B., Clinton.....Leicesters.
Miller, Jos. Ephraim, Greenbush .....Oxfords.
Milne, R. & Son, Green River .....Shropshires.
Milot, Hercule, Yamachichi, Que.....Oxfords.
Milot, Honore, Yamachichi, Que. .....Cotswolds.
Miltimore, E. S., Knowlton, Que.....Leicesters.
Monkman, W. D., Bond Head .....Shropshires.
Morgan, C. E., Milliken . .....Cotswolds.
Morin, P. N., St. Norbert, Que. .....Leicesters.
Morrin, D. T., Lachute, Que.....Leicesters.
Munro, Albert, Beachburg .....Oxfords.
McAlister, W. E., Durham .....Leicesters.
McCrae, D , Guelph .....Southdowns & Cotswolds.
McCue, Jas. & Son, Melanchton.... .....Leicesters.
McDonald, Rod., Mandaumin .....Cotswolds.
McDonald, A. B., Appin.....———.
McDonald, Roderick, Manitowaning .....Cotswolds.
McEwen, Col. R., Byron .....Southdowns.
McKillican, W. E., Vankleek Hill .....Leicesters.
McLaren, P. S., McGarry.....Oxfords.
McLean, Jno. G., Beachburg .....Oxfords.
McMillan, D., Priceville.....Leicesters.
McPhee, D. A., Vankleek Hill.....Oxfords.
McPherson, Jas., Axe Lake.....Leicesters.
McRobie, Fred., Iroquois .....Leicesters.
Nault, Ferd., Wotton, Que. .....———.
Nelson, T. C., Dartford.....Dorsets.
Nichol, Robt., Brussels .....Leicesters.
Nicholls, Jas. H., Dundalk ....Leicesters.
Noiseux, Frederic, St. Cesaire, Co. Rouville, Que.Leicesters.
Oak Park Stock Farm Co., Brantford .....———.
Ouimet, Clovis, St. Francois de Sales, Que.....Lincolns.
Pare, Augustin, Riviere aux Chiens, Que.....Leicesters.
Parkinson, Ernest, Eramosa .....Lincolns.
Parkinson, L., Eramosa.....Lincolns.
Parkinson, G. & W., Eramosa.....Leicesters.
Partridge, A. W., Crown Hill .....Leicesters.
Patenaude, Art., St. Remi, Que.....Leicesters.
Patenaude, P., St. Remi, Que. .....———.
Patrick, J. H., Ilderton.....Lincolns.
Pelletier, L. C., Montreal, Que. .....Oxford Downs.
Pepin, Ludger, St. Norbert, Co. Arthabaska, Que.———.
Perreault, T., St. Esprit, Que.....Cotswolds.
Perrier, Octave, Laprairie, Que. .....Cotswolds.

MEMBERS OF DOMINION SHEEP BREEDERS' ASSOCIATION, 1907 AND 1908 —*Concluded.*

Name and Address	Breed
Pettit, W. G. & Sons, Freeman	Shropshires
Pichette, Donat, St. Esprit, Que.	Cotswolds.
Potter, A. B., Montgomery, Sask.	Leicesters.
Provencher, Edouard, St. Norbert, Que.	Leicesters.
Purcell, Jno., Huntington, Que.	Leicesters.
Parnell, Isaac, Spring Road, Que.	Leicesters.
Purves Bros., Lucknow	Leicesters.
Quain, John, Reedsdale, Que.	Leicesters.
Ralston, J. T., Knowlton, Que.	Leicesters.
Rawlings & Bailey, Forest	Cotswolds.
Reed, Isaac, Ardtrea	Leicesters.
Richardson, Jno., Port Guichon, B.C.	Cotswolds.
Rivet, Ovila, St. Esprit, Co. Montcalm, Que.	Leicesters
Robertson, Jas. & Sons, Milton	Dorsets.
Robertson, John, Wyoming	Shropshires.
Roberge, J. P., St. Peirre, Isle of Orleans, Que.	Leicesters.
Robinson, Chas., Odell Town, Que.	Cotswolds.
Rodrique, Paul, Beauceville, Que.	Leicesters.
Rooney, Peter M., Kinnear's Mills, Que.	Leicesters.
Rosevear, E. A., Roseneath	Dorsets.
Ross, Jno., Kinnear's Mills, Que.	Leicesters.
Rudd, C. C., Eden Mills	Cotswolds.
Rudell, A., Hespeler	Shropshires.
Saunders, D. D., Arthur	Leicesters.
Senecal, L. C., St. Marc de Vercheres, Que.	Leicesters.
Shaw, Robt., Brantford	Leicesters.
Shaw, D. M. & Son, Basingstoke	Leicesters.
Shireff, Wm. & G. G., Clarence	Shropshires.
Skinner, F. T., Indian Head, Sask.	Shropshires.
Smith, Jno., Beachville	Leicesters.
Smith, A. W., Maple Lodge	Leicesters.
Smith, W. M., Scotland	Dorsets.
Snaden, Miss Annie E., Danville, Que.	——.
Snell, Jas., Clinton	Leicesters.
Snell & Lyons, Norval	Cotswolds
Sockett, Jno., Rockwood	Cotswolds.
Somers, Dan'l, Gilbert Plains, Man.	Leicesters
Stevens, J. M., Bedford, Que.	Leicesters
Stevens, A. J., Bedford, Que.	Leicesters.
Stevenson, A., Atwood	Oxfords.
Stewart, Alex., Elving Springs	Oxfords.
Stinson, R. H., Horning's Mills	Cotswolds.
Strong, W. C., North Sutton, Que.	Leicesters.
Strong, J. B., West Sutton, Que.	Leicesters.
Sutton, Mark, Ospringe	Leicesters.
Sylvester & Frere, St. Theodore d'Acton, Que.	Cotswolds.
Talbot, Geo., St. Norbert, Co. Arthabaska, Que.	——.
Taylor, A. M., Annan	——.
Taylor, W. W., Maple Valley	——.
Telfer, Geo., Paris	Southdowns.
Telfer Bros., Paris	Southdowns.
Thompson, A., Allan's Corners, Que.	Leicesters.
Thompson, Douglas, Woodstock	——.
Thouis, Louis, Repentigny, Que.	——.
Tolton, Jas., Walkerton	Oxfords.
Tremblay, Achille A., Les Ebouliment, Que.	Leicesters.
Turenne, Dephis, St. Paul l'Ermite, Que.	Leicesters.
Turnbull, Oliver, Walton	Leicesters.
Turner, Jno. A., Calgary, Alta.	Shropshires.
Underhill, Jos., Claremont	Shropshires & Cotswolds.
Vance, Robt., Ida	Cotswolds.
Wallace, Wm. A., Glen Morris	Shropshires.
Wallace, Thos. J., Kinnear's Mills, Que.	Leicesters.
Weller, A. E., Duncan	Leicesters.
Wells, A. C., Sardis, B. C.	Lincolns.
Westington & Leon, Plainville	Leicesters.
Whitelaw, A. & W., Guelph	Leicesters.
Wightman, Robt., Clifford	Leicesters.
Williams, H. E., Knowlton, Que.	Shropshires.
Willis, Ralph, Newmarket	Cotswolds.
Wilson, J. Lockie, Toronto	——.
Wise, Ed. H., Clinton	Leicesters.
Wood, C. & E., Freeman	Leicesters.
Wood, Wm., Palermo	Leicesters.
Woolnough, J. B., Port Dover	Cotswolds.
Wright, W. E., Glanworth	Shropshires.
Young, Henry, Blyth	——.

Name and Address	Breed
Adamson Bros., Gladstone, Man	Yorkshires.
Ainsworth, Harry, Buchanan, Sask	Berkshires
Aldons, R. B., Lorlie, Sask	Yorkshires.
Allin, Fred T., Hampton	Yorkshires.
Allison, David, Roland, Man	Berkshires.
Appleton Bros., Nelson, B.C.	Chester Whites.
Armstrong, Henry, Forrest Station, Man	Yorkshires.
Ash, Wm R., North Ridge	Berkshires.
Bailey, Jas., Sardis, B.C.	Poland Chinas.
Bailey, J. W., Wetaskawin, Alta	Berkshires.
Baillargeon, P., St. Luc, Co. St. Jean, Que.	———.
Baird, R. & A. H., Chesterfield	Yorkshires.
Baker, Garfield, Henfryn	Berkshires.
Baker & Vereker, Fort Saskatchewan, Alta	Yorkshires.
Balsdon, W. H., Whitby	Berkshires.
Balsdon, J. I., Markham	Berkshires.
Banting, T. E. M., Banting, Man	Tamworths.
Barker, W. S., Deloraine, Man	Yorkshires.
Barr, David, jr., Renfrew	Yorkshires.
Basinet, J. L., St. Paul, Que	Yorkshires.
Batcheller, C. A., Bedford, Que	Tamworths.
Beaudet, E., Lotbiniere, Que	Yorkshires.
Becksted, G. A., Morrisburg	Berkshires.
Beckton, J. M., Glencoe	Berkshires.
Beingessner, F. X., Mildmay	Berkshires.
Bell, J. F., Leamington	Berkshires.
Bell, J. J., Islay, Alta	Yorkshires.
Belton, Thos. H., Hagersville	Yorkshires.
Benham, C. J., Sweetsburg, Que	Tamworths.
Bennett, F. G., Canterbury, Que	Yorkshires.
Bennett, Geo., Charing Cross	Chester Whites.
Benson, Stephen, Neepawa, Man	Yorkshires.
Bergevin, E. Ustache, St. Martine, Que	———.
Betzner, Geo T., Copetown	Yorkshires.
Birch, R., Anderson	Yorkshires.
Bissett, Jas., Roseland, Man	Berkshires.
Black, D. Allan, Kingston	Yorkshires.
Blackburn, Wm., Murray Bay, Que	Yorkshires.
Blair, Robt., Balderson	Berkshires.
Blanchet, Louis, St. Jean, Que	Yorkshires.
Blanchet, Etien, St. Marc, Que	Yorkshires.

Name and Address	Breed
Blight, Emerson, Bavelaw, Sask	Berkshires.
Blight, Emerson, Millwood, Man	Berkshires.
Bocrama, G., N. Battleford, Sask	Yorkshires.
Bonnycastle, Chas. E., Campbellford	Berkshires.
Boutet, Joseph, Victoriaville, Que	Chester Whites.
Bowman, T. E., High River, Alta	Berkshires.
Bowman, W. R., Mt. Forest	Yorkshires.
Boyd, C., Russell	Chester Whites.
Boyes, J., jr., Churchill	Berkshires.
Boyes, Enoch, Sperling, Man	Yorkshires.
Boyle, J. W., Woodstock	Yorkshires.
Bradley, J. T., Gilbert Plains, Man	Yorkshires.
Braid, W., Oak River, Man	Berkshires.
Bray, Jno., Logoch, Man	Yorkshires.
Bray, James, Portage La Prairie, Man	Berkshires.
Bredt, P. M., Regina, Sask	Yorkshires.
Brethour, J. E., Burford	Yorkshires.
Brien, E. & Son, Ridgetown	Berkshires.
Bright, John, Myrtle Station	Berkshires.
Brodeur, Philias, Ste. Cesaire, Que	Berkshires.
Brodie, Peter, Little York, P E.I.	Berkshires.
Brooks, J. D., Plum Coulee, Man	Poland China.
Brown, F. W., Portage La Prairie, Man	Berkshires.
Browne, Mrs. Walter, Killarney, Man	Yorkshires.
Browne Bros., Ellisboro, Sask	Berkshires.
Brownlee, W. J., Bunyan	Yorkshires.
Brownridge, Wm., Ashgrove	Yorkshires.
Bryant, Wm A., Cairngorm	Yorkshires.
Bryson, Jos., Brysonville, Que	Tamworths.
Bulstrade, C. G., South Qu'Appelle, Sask	Berkshires.
Burgess, Jas. H., Bothwell	Berkshires.
Burkholder, Noah, Cherrywood	Berkshires.
Cadman, W. H., Gosport	Yorkshires.
Cameron, D. P., Finch	Yorkshires.
Cameron, Dougald, Summerstown Station	Yorkshires.
Campbell, Mac., Harwich	Duroc Jerseys.
Campbell, D. W., Holly Park	Berkshires.
Campbell, Jno., Vankleek Hill	Yorkshires.
Campbell, Geo., Killarney, Man	Tamworths.
Caron, Thodie, St. Aubert, Que	Yorkshires.
Carrier, Felix, Verte Vallee, Que	Yorkshires.

MEMBERS OF DOMINION SWINE BREEDERS' ASSOCIATION, 1907 AND 1908.—*Continued.*

Name and Address	Breed
Carroll, Thos., Nutana, Sask	Berkshires.
Carswell, E., Penhold, Alta	Yorkshires.
Cass, Jas. A., Cass Bridge	Yorkshires.
Cavan, Geo., Box 1052, Toronto	Berkshires.
Central Experimental Farm, Ottawa	Yorkshires.
Cerswell, J. A., Bond Head	Yorkshires.
Chapman, F. M., Audley	Yorkshires.
Chateauvert, Victor, Quebec, Que	Yorkshires.
Clark, H. G., Norval	Berkshires.
Clarke, Robt., Ottawa	Chester Whites.
Clark, F. W., Christies, N.B.	Chester Whites.
Clark, J. L., Norval	Berkshires.
Clendenning Bros., Harding, Man	Yorkshires.
Cole, T. J., Bowmanville	Yorkshires.
College de Saint Laurent, St. Laurent, Que.	Yorkshires.
Collins, P. O., Bowesville	Yorkshires
Colwell Bros., Newcastle	Tamworths.
Colwell, A. A., Newcastle	Tamworths.
Connolly, Alf., Danville, Que	Yorkshires.
Cook, W. P., York, P.E.I.	Yorkshires
Corbin, Oscar, St. Esprit, Que	Yorkshires.
Corning, H. W., Chegoggin, N.S.	Chester Whites.
Cornish, A. E., Broadview, Sask.	Yorkshires.
Court, Leonard, Donaldson, P.E.I.	Chester Whites.
Couston, Broet & Cie., Peribonca, Que.	Yorkshires.
Couture, Jos., Lorette	Yorkshires.
Couture, Frs., Augustin, Que	Yorkshires.
Cowan, J. S., Donegal	Berkshires.
Cowieson, J. B., Queensville	Berkshires.
Crandall Bros., Cherry Valley	Tamworths.
Crockett, Geo., York, P.E.I.	Berkshires.
Cross, John, Bond Head	Berdshires.
Crowe, J. H., Gilbert Plains, Man.	Berkshires.
Crowell, W. N., Napinka, Man.	Berkshires.
Cumberland, Barlow, Port Hope	Yorkshires.
Cumming, Alex., Portage La Prairie, Man.	Berkshires.
Currie, C., Morriston	Tamworths.
Curry, Hugh, Lacomb, Alta.	Berkshires.
Curry, Wm., S. Qu'Appelle, Sask.	Berkshires.
Curtis, E. H., Alix, Alta.	Yorkshires.
Dalton, Jno., Victoria Harbor	Chester Whites.
Davidson, Lorne, Meadowvale	Berkshires.
Davidson, Thos., Spring Valley	Tamworths.
Davies, Robt, Todmorden	Yorkshires.
Davis, H. J., Woodstock	Yorkshires.
DeCourcy, D., Bornholm	Yorkshires & Chester Whites.
Dedels, H., Breslau	Yorkshires.
DeLisle, G., Lloydminster, Sask	Yorkshires.
Demstedt, Abe, Carberry, Man	Yorkshires.
Denis, Arsene, St. Norbert, Que	Yorkshires.
Denison, W. S., Denison's Mills, Que.	Chester Whites.
Department of Agriculture, Edmonton, Alta.	Yorkshires.
Derbyshire, C. J., Wheatley	Duroc-Jerseys.
Dillon, Jas., Ellisville	Berkshires.
Dollar, E. H., Heuvelton, N.Y., U.S.A.	Chester Whites.
Dolson, H. A., Alloa	Berkshires.
Dolson, Samuel, Alloa	Berkshires.
Donaldson, Jas., DeWittville, Que	Chester Whites.
Douglas, D. & Son, Mitchell	Tamworths.
Douglas, Robt. M., Tantallon, Sask.	Berkshires.
Douglas, A. R., Franklin, Man.	Berkshires.
Dubois, Albert, Chambly Basin, Que.	Yorkshires.
Duck, R. F. & Son, Port Credit	Yorkshires.
Duforth, Louis, St. Marc, Que.	Berkshires & Yorkshires.
Dugre, J. O., Point-du-Lac, Que.	Yorkshires.
Dunbar, J., St. Mary's	Berkshires.
Durham, Jno. N., Vanessa	Berkshires.
Durham, W. H., Box 1052, Toronto	Berkshires.
Duthie, Jas., Hartney, Man.	Berkshires.
Ecole d'Agriculture d'Oka, Oka, Que.	Yorkshires.
Edgerby, Johnston, Aylmer, Que.	Yorkshires.
Edwards, H. W., Coaticook, Que	Tamworths.
Edwards, W. V., Souris, Man.	Berkshires.
Ellenton, John & Son, Hornby	Berkshires.
Elliott Bros., Wawanesa, Man.	Berkshires & Yorkhires.
Elliott, Robt., Brysonville, Que.	Chester Whites.
Elliott, H. J., Miami, Man.	Berkshires.
Elliott, W. D., Comber	Berkshires.
English, W. H., Harding, Man.	Berkshires.
Evans, Wm. H., North Battleford, Sask.	Yorkshires.
Ewens, J. M., Bethany, Man.	Berkshires.
Ezard, Jno. E., Cooksville	Yorkshires.

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Farlinger, J. A., Cornwall.....Yorkshires.
Featherston, Jos. & Son, Streetsville.....Yorkshires.
Ferguson, A. L., Souris, Man.....Berkshires.
Field, W. H. & J. C., Vanessa.....Berkshires.
Findlay, Wm., Walter's Falls.....Yorkshires.
Findlayson, Kenneth, North Battleford, Sask..Yorkshires.
Flatt, D. C. & Son, Millgrove.....Yorkshires.
Fletcher, G. D., Binkham.....Berkshires & Yorkshires.
Fleury, Alfred, Ange Gardens, Que.....Yorkshires.
Foisy, C. A., L'Epiphanie, Que.....Berkshires.
Foley, J. A., St. Thuribe, Que.....Yorkshires.
Forrest, H. C., Wardsville.....Berkshires & Yorkshires.
Forth, D. J., Glen Buell.....Yorkshires.
Foster, A. H., Twin Elm.....Yorkshires.
Fraser, John, Morris, Man.....Chester Whites.
Fraser, J. A., Portage La Prairie, Man..... Berkshires.
Fretz, J. H., Tintern.....Tamworths.
Frisby, R. S., Victoria Square.....Yorkshires.
Gamble, Robt., Swan Lake, Man.....Yorkshires.
Garbutt, R. J., Belleville.....Yorkshires.
Garceau, Gedeon, Point-du-Lac, Que.....Yorkshires.
Garden, Norman, Ellisboro, Sask.....Berkshires.
Gareau, J. J., St. Roch l'Achigan, Que.....Yorkshires.
Gaucher, Alex., St. Damase, Que.....Chester Whites.
Gaw, Jas., South Roxton, Que.....Yorkshires.
Geoffrey, C. E., St. Elie d'Oxford, Que.....Yorkshires.
George, H. E., Crampton.....Chester Whites.
George, E. D., Putnam.....Chester Whites.
Gerin, Leon, Coaticook, Que.....Yorkshires.
German, Herbert, St. George.....Tamworths.
Gerry, Idola, Milton East, Que.....Yorkshires.
Gibson, Wm. J., Marshfield, P. E. I.....Tamworths.
Gibson, D. J., Newcastle.....Tamworths.
Gibson, Jno., Credit Forks, Berkshires.....Berkshires.
Gingras, Geo. E., Knowlton, Que.....Tamworths.
Gingras, Alfred, St. Cesaire, Que.....Chester Whites.
Girard, Nap. South Durham, Que.....Chester Whites.
Glen Bros., Didsbury, Alta.....Yorkshires.
Goodall, Arch. J., Bathgate, N. D., U. S. A...Berkshires.
Goodfellow, Jno., Myrehall.....Berkshires.
Goodliffe, S. J., Sussex, N. B.....Yorkshires.
Goring, Jas., Roden, Man.....Chester Whites.
Gosslin, Frs. X., Ste. Famille, Ile d'Orleans, Que. Yorkshires.
Gouin, P. A., Three Rivers, Que.....Tamworths.
Gourley, Jos., Carp.....Berkshires.

Graham, A., Pomeroy, Man.....Yorkshires.
Graham, H. C., Kitscoty, Alta.....Yorkshires.
Graham, G. W., Udora.....Yorkshires.
Green, F. L., Greenwood.....Yorkshires.
Greenshields, J. N., Danville, Que.....Yorkshires.
Greenway, Hon. Thos., Crystal City, Man.....Yorkshires.
Greenwood, Thos., Douglas, Man.....Berkshires.
Griffiths, D. J., Stanley, N. B.....Chester Whites.
Grimby, Geo. B., Cartwright, Man.....Chester Whites.
Grove, J. L., Ringwood.....Yorkshires.
Guilbert, Arthur, Letellier, Man.....Yorkshires.
Guinn, H., Edberg, Alta.....Poland Chinas.
Gunn, D. & Son, Beaverton.....Yorkshires.
Hadwen, G. H., Duncans, B. C.....Berkshires.
Haldon Bros., Turgoose, B. C..... Tamworths.
Haley, L. B, Rawdonville, Alta.....Tamworths.
Hall, W. A., Stanbridge E., Que.....Tamworths.
Halliday, Frank, Eldon, P. E. I.....Yorkshires.
Hallman, A. C., Breslau.....Tamworths.
Hamel, Chas., Beauceville, Que.....Yorkshires.
Hamel, M. A. P., Village des Aulnaies, Que....Yorkshires.
Hamilton, Geo., Neepawa, Man.....Yorkshires.
Hamilton, Jas., Shakespeare.....Berkshires.
Hanington, J. B., Lacombe, Alta.....Yorkshires.
Hankinson, L. D., Grovesend.....Yorkshires.
Harding, R. H., Thorndale.....Chester Whites.
Hardy, Wellington, Roland, Man.....Yorkshires.
Harris, R. N., Gatineau Pt., Que.....Yorkshires.
Hatch, E. A., Staffordville.....Yorkshires.
Hauser, Ignatius, Weisenburg.....Yorkshires.
Hawes, H. J. & Son, Millet, Alta.....Berkshires.
Hawkes, J. B., Balgonie, Sask.....Berkshires.
Hawkins, R. C., Swan Lake, Man..... Berkshires.
Hawkins, W. & Son, Alliston.....Tamworths.
Henders, R. C., Culross, Man.....Berkshires.
Heslop, Arthur, Appleby.....Yorkshires.
Hibbert, F., Cupar, Sask..... .....Berkshires.
Hicock, W. W., Seeley's Bay.....Tamworths & Berkshires.
Higgins Bros., Brandon, Man.....Yorkshires.
Hill, Jno., Camboro.....Yorkshires.
Hillhouse, A. P., Bondville, Que..... Yorkshires & Tamworths.
Hillier Bros., Albuna.....Chester Whites.
Hitchcock, Jos. S., Griswold, Man.....Yorkshires.
Hogle, S. G., Violet.....Yorkshires.
Holt, Chas. L., Stettler, Alta.....Berkshires.

MEMBERS OF DOMINION SWINE BREEDERS' ASSOCIATION, 1907 AND 1908.—*Continued.*

Name and Address.	Breeds.
Honey, R., Brickley	Yorkshires.
Hood, G. B., Guelph	Yorkshires.
Hooper, W. H., Moosejaw, Sask.	Yorkshires.
Horn, Peter, Regina, Sask.	Yorkshires.
Hoskin, Bertram, The Gully	Tamworths.
Hostetler, Chris. & Sons, New Hamburg	Yorkshires.
Houston, R., Dixie	Yorkshires.
Howard, Wm. A., Wetaskiwin, Alta.	Berkshires.
Howes, M. J. & Son, Millet, Alta.	Berkshires.
Howlett, Ira L., Keldon	Yorkshires.
Howson, Gilbert, Keene	Yorkshires.
Hughes, Sam'l, Grandview, Man.	Yorkshires.
Hume, Alex. & Co., Menie	York-hires.
Hunt, C. W., Indian Head, Sask.	Yorkshires.
Hurley & Son, Belleville	Yorkshires.
Hutchison, Lew, Duhamel, Alta	Berkshires.
Hutchison, J. T., Hayfield, Man	Yorkshires.
Hyde, Geo. A., Shakespeare	Yorkshires.
Hyslop, Robert, Brantford	Berkshires.
Irving, J. D., Buctouche, N. B.	Yorkshires.
Isaac, D. N., Souris Man	Berkshires.
Jackman, W. J., East Clover Bar, Alta.	Berkshires
James, Clarence M., Rosser, Man.	Yorkshires.
James, Walter, & Son, Rosser, Man.	Yorkshires.
Jasper, A. F., Harding, Man.	Berkshires.
Jasper, Thos., Harding, Man.	Berkshires.
Jeffs, E. & Son, Bond Head	Berkshires
Jewett, Jno. R., Macinque, N. B	Chester Whites.
Johnson Bros., Underwood	Yorkshires.
Johnston, Ritchison, Radisson, Sask.	Berkshires.
Johnston, C. L., Rosedene	Berkshires.
Jones, Wm., Zenda	Yorkshires.
Jones, D., Caledonia	Yorkshires.
Jones, Jas., Calgary, Alta	Berkshires.
Kay, W. F., Philipsburg, Que.	Yorkshires.
Kean, J. & Son, Orillia	Yorkshires.
Keating, Jas., Dundalk	Yorkshires.
Kelly, John & Son, Shakespeare	Berkshires.
Kelly Bros., Hagersville	Berkshires.
Kennedy, N., Kemptville	Yorkshires.
Keolln, H., Glen Allen	Yorkshires & Berkshires.
Kerr, R. J., Mimosa	Berkshires.
Kidney, R. E. Woodstock, N. B.	Chester Whites.
King, Oliver, Wawanesa, Man	Yorkshires
Kirbyson, J. R., Fairfax, Man	Yorkshires.
Knight, Geo. E., Sardis, B. C.	Chester Whites.
Knight, Stephen, Elginburg	Berkshires.
Lafontaine, Edouard, Plessisville, Que.	———.
Lang, J. & Son, Burketon	Berkshires.
Langelier, Gns. A., Cap Rouge, Que.	Yorkshires.
Laporte, J. O., St. Jean, Que.	Yorkshires.
Lavalee, Louis, St. Guillaume, Que.	Yorkshires.
Lavalle, Paul, Berthier en Haut, Que.	Yorkshires.
Lawrence, J., Oxford Centre	Berkshires.
Lea, Richard, Bridge Creek, Man.	Berkshires.
Leclere, Jos., St. Charles de Bellechasse, Que.	Yorkshires.
Leclerc, Gregoire, Lorette, Que.	Yorkshires.
Lee, Jas. & Son, Durham, Que.	Berkshires.
Lee, J. W. & Son, Simcoe	Yorkshires.
Lefaivre, P. M., Vankleek Hill	Berkshires.
Legatt, Jno. & Son, Dunham, Que.	Yorkshires.
Legge, A., Minto, N. D., U. S. A.	Berkshires.
Legris, Ulderic, St. Leon, Co. Maskinonge, Que.	Yorkshires.
Lemaire, Joseph, St. Marjorique, Que.	Yorkshires.
Lemon, S., Kettleby	Berkshires.
Leonard, Jas. B., Appleby	Yorkshires.
Letournean, E., St. Famille, Ile d'Orleans, Que.	Yorkshires.
Levasseur, Nap., St. Angele de Nicolet, Que.	Yorkshires.
Litchy, Jno. B., Nithburg	Yorkshires.
Linton, Wm., Jr., Aurora	Yorkshires.
Lister, W. S., Middlechurch, Man.	Berkshires.
Little, T., Jr., Kirkwall	Yorkshires & Berkshires.
Lloyd, Jas. H., St. Lin, Que.	Yorkshires.
Logan, R. G., Monnt Wolfe	Berkshires.
Logan Bros., Amherst Point, N. S.	Berkshires.
Lorrain, Alfred, St. Jerome, Que.	Yorkshires.
Lowden, M. L., Binbrook	Berkshires.
Loynachan, A. D., Glenbrook	Yorkshires.
Lyons, S. J., Norval	Berkshires.
Mabon, Wm., Neelin, Man.	Yorkshires.
Macdonald, D. B., North Bedeque, P. E. I.	Berkshires.
Maclean, W. F., Donlands	Yorkshires.

Maguire, A. S., Elgin, Man.....Yorkshires.
Main Bros., Glenrose, Sask.....Berkshires.
Mair, Jas., Peabody.....Berkshires.
Mansean, Francois, Nicolet, Que.....Yorkshires.
Marcotte, Armand, St. Basil Station, Que.....Yorkshires.
Marjerison, Wm., Apple Hill.....Berkshires.
Mark, G. H., Little Britain.....Berkshires.
Markle, D. G., Lamont, Alta.....Berkshires.
Martin, R. G., Marysville.....Yorkshires.
Martin, W. H. & Son, Warden, Que.....Berkshires.
Martin, W. A., Gilead.....Berkshires & Yorkshires.
Martin, E. E., Canning.....Berkshires.
Mason, H. A., Scarboro.....Berkshires.
Matchett, Alec., Treherne, Man.....Berkshires.
Mathewson, Jno., Virden, Man.....Berkshires.
Mathieu, Nap., Beauceville, Que.....Yorkshires.
Mayloney, F. X., Chapeau, Que.....Yorkshires.
Maynard, J. T., Chilliwack, B.C.....Duroc Jerseys & Essex.
Melborn, Frank, Virden, Man.....Berkshires.
Menzies, J. A., Lloydminster, Sask.....Yorkshires.
Mercer, Thos., Markdale.....Yorkshires.
Meredith, J. E., Tupperville.....Poland Chinas.
Midd, Stephen, Auburn.....Berkshires.
Miller, H. J., Lorenz.....Yorkshires.
Miller, Marshall, Brome Centre, Que.....Chester Whites.
Miller, R. E., Switzerville.....Yorkshires.
Miltimore, E. F., Knowlton, Que.....Tamworths.
Mitten, W. J., Thamesville.....Yorkshires.
Moodie, R., Guelph.....Berkshires.
Mookenberg, D., Markerville, Alta.....Yorkshires.
Mooney, J. A., Valley River, Man.....Yorkshires
Moore, W. H., Scotch Lake, N.B.....Yorkshires.
Morgan, L. E., Milliken.....Berkshires.
Morrison, A. & J., Homewood, Man.....Berkshires.
Morrow, R. O., Hilton.....Tamworths.
Morkin, J. P., St. Albert, Alta.....Berkshires.
Mortson, W. H., Brandon, Man.....Berkshires.
Muma, G. B., Ayr.....Yorkshires.
Murdock, Wm., Palmerston.....Yorkshires.
McBean, A. G., Lancaster.....———.
McBeath, Geo., Prince Albert, Sask.....Berkshires.
McBeth, Jno., Dromore.....Berkshires.
McBeth, Alex. A., Marshfield, P. E. I.....Yorkshires.
McCallum, Thos. H., Sperling, Man.....Berkshires.
McCarthy, Ed. Tamarisk, Man.....Yorkshires.

McConnell, W., H., Aylmer, Que.....Yorkshires.
McCormick, H., Paris.....Berkshires.
McCullough, P. & M., East Durham, Que.....Yorkshires.
McDiarmid, H. S., Fingal.....Yorkshires.
McDonald, A. D., Napinka, Man.....Berkshires.
McDonald, Peter, Virden, Man.....Berkshires.
McDonald Bros., Woodstock.....Berkshires.
McEwen, Allan, Clearwater, Man.....Berkshires.
McEwen, P. J., Kertch.....Berkshires.
McEwen, Jas., Kertch.....Berkshires.
McGerrigle, J. B., Tatehurst, Que.....Yorkshires.
McGhee, Wm., jr., Beachville.....Berkshires.
McGill, J. A., Neepawa, Man.....Berkshires.
McGrath, P., Oak Bluff, Man.....Poland Chinas.
McIntosh, Mrs. C. W., Lacombe, Alta.....Yorkshires & Berkshires.
McKellar, Jno. M., Box 10, Belmont.....Tamworths.
McKinnon, D. C., Atherley.....Yorkshires.
McLaughlin, Mrs. O. A., Knowlton, Que.....Yorkshires.
McLean, Dan'l D., Barrie.....Berkshires.
McLeod, Jno., Milton West.....Berkshires.
McNish, W. H. & A. H., Lyn.....Tamworths & Yorkshires.
McPhail, Robt. A., New Haven, P. E. I.....Berkshires.
McPherson, W. S., Wadena, Sask.....Yorkshires.
McPherson, W. T., Wadena, Sask.....Yorkshires.
McQueen, M. J., Salem.....Berkshires.
McRorie, K. A., Lauder, Man.....Berkshires.
Naumas, Jos., Fish rville.....Berkshires.
Nelles, Alex. & Son, Boston.....Tamworths.
Neven, Joseph, St. Didace, Que.....Yorkshires.
Nichol, Robt., Brussels.....Yorkshires.
Nichol, J. C., Hubrey.....Tamworths.
Oak Park Stock Farm Co., Brantford.....Berkshires.
O'Donnell, Thos., Gadshill.....Berkshires.
Ontario Agricultural College, Guelph.....Yorkshires.
Orchard, Frank, Graysville, Man.....Tamworths.
Ottawa Valley Journal, Ottawa.....Berkshires & Yorkshires.
Ouimet, Clovis, St. Francois de Salles, Que.....Yorkshires.
Page, J. A., Tryconnell.....Berkshires.
Paquin, S., Deschambault, Que.....Yorkshires.
Pare, Joseph, St. Hubert, Que.....Yorkshires.
Parent, J. E., Charlesbourg, Que.....Yorkshires.
Parkin, H. & G., Oxford Centre.....Berkshires.
Patterson, Wm., Churchill.....Berkshires.
Patterson, Thos., Boissevain, Man.....Berkshires.
Patton, David, Paris Station.....Tamworths.

MEMBERS OF DOMINION SWINE BREEDERS' ASSOCIATION, 1907 AND 1908.—*Concluded.*

Name and Address	Breed
Paul, Jno. G., Moosomin, Sask	Berkshires.
Pearson, S. J. & Son, Meadowvale	Berkshires.
Penner, Wm., Springmount	Yorkshires.
Perry, P. W., Deloraine, Man	Berkshires.
Pettit, W. G. & Son, Freeman	Yorkshires.
Phaneuf, Antonie, St. Antoine, Vercheres, Que	Chester Whites.
Phillips, Russell, Olinda	Berkshires.
Phillips, Thos., Essex	Poland Chinas.
Phillips, W. H., Battleford, Sask	Berkshires.
Pilletier, L. C., La Prairie, Que	Chester Whites.
Plaunt, X., Northcote	Berkshires.
Polardy, Louis, St. Hyacinthe, Que	Chester Whites.
Poole, W. R., Freeland	Yorkshires.
Pope, J. C., Regina, Sask	Yorkshires.
Porter Bros., Appleby	Berkshires.
Porter, Alex., Alexander, Man	Berkshires
Potter, A. B., Montgomery, Sask	Yorkshires.
Pritchard, R. J., Roland, Man	Berkshires.
Quebec, H. M., Clover, Bar, Alta	Tamworths.
Quintin, Ephrem, Mont. Johnston, Que	Yorkshires.
Redditt, Geo., Richmond Hill	Berkshires.
Reid, R. & Co., Ottawa	Tamworths & Berkshires.
Reid, Jas., Glen William	Yorkshires.
Reid, Isaac, Ardtrea	Berkshires.
Rettie, Jas., Norwich	———.
Rhodehouse, W. J., Comber	Berkshires.
Rice, Geo., Tillsonburg	———.
Richard, J. J., Red Deer, Alta	Yorkshires.
Richardson, Fred., Columbus	Yorkshires.
Rinter, Chas. & Son, Cowansville, Que	Tamworths.
Robb, M. T., Huntingdon, Que	Yorkshires.
Robb, Jno., Salem	Berkshires.
Roberge, J. P., St. Pierre, Ile d'Orleans, Que	Yorkshires.
Robinson, W. T., Goodwood	Yorkshires & Berkshires
Rogers, C. F., Woodstock, N.B.	Yorkshires.
Rondeau, Norbert, Weedon Centre, Que	Yorkshires.
Root, Geo., F., Red Deer, Alta	Berkshires.
Rose, C. E., Barnston, Que	Berkshires.
Roth, Jacob, Haysville	Yorkshires.
Rothwell, B., Ottawa	Berkshires.
Rouleau, A., St. Gregoire, Que	Yorkshires.
Roulston, W. D., Garnet	Tamworths.
Rusnell, D. H., Stouffville	Berkshires.
Russell, Jas. A., Precious Corners	Yorkshires.
Rye, Jas., Duagh, Alta	Tamworths.
Seaman, F. C., Strathcona, Alta	Tamworths.
Scarfe, Thos. & Son, Rocky Saugeen	Yorkshires.
School of Agriculture, St. Anne la Pocatiere, Que.	Yorkshires.
Scott, John, Atha	Berkshires.
Scott, Walt. K., Sheho, Sask	Yorkshires.
Semple, J. R., Brule, N. S.	Berkshires & Yorkshires.
Semple, Hugh, Hereward	Yorkshires.
Shanks Bros., Pettapiece, Man	Berkshires.
Shannon Bros., Cloverdale, B. C	Berkshires.
Shea, Thos. M., Fergus	Berkshires.
Shepherdson, W. J., Walter's Falls	Berkshires & Tamworths.
Sheriff, Wm. & G. G., Clarence	Chester Whites.
Shields, W. A., Milton	Berkshires.
Shopland, J. S., North Saanich, B. C	Berkshires.
Shoup, J. B., Brandon, Man	Yorkshires.
Silverthorn, Jno., Scotland	Chester Whites.
Sinclair, Peter, Brocksden	Yorkshires.
Siprell & Carroll, Carlholm	Berkshires.
Skinner, Fred T., Indian Head, Sask	Yorkshires.
Slater, S. D., Ottawa	Tamworths.
Smith, A. M., Dugald, Man	Berkshires.
Smith, W. M., Scotland	Poland Chinas.
Smith, G. M., Haysville	Yorkshires.
Smith, D., Gladstone, Man	Yorkshires.
Smith, Jno. & Son, Duntroon	Yorkshires.
Smith Bros., South Woodslee	Berkshires.
Snaith, Robt., Brandon, Man	Yorkshires.
Snell, J. H., Hagersville	Yorkshires.
Snell & Lyons, Norval	Berkshires.
Snowden, Sam'l, Bowmanville	Berkshires.
Snowden Bros., Bayfield	Berkshires.
Somerville, F. R., Forest	Berkshires.
Southcott, W., Minnedosa, Man	Yorkshires.
Sparrow, J. B., St. Agathe, Que	Yorkshires.
Spencer, W. H., Morpeth	Berkshires.
Srigley, John & Son, Allandale	Berkshires.
Standish, Jno. E., Rougemont, Que	Chester Whites.

Startz, Jno. E., Kenilworth.....Berkshires.
Stauffer, N. B., High River, Alta.....Berkshires.
Stephen, Wm., Heron, Sask.....Berkshires.
Stevens, A. J., Bedford, Que.....Chester Whites, Tamworths & Berkshires.
Stevens, Jno. M., Bedford, Que.....Tamworths, Chester Whites.
Stevens, W. F., Clover Bar, Alta.....Berkshires.
Stewart, Jas. J., Gladstone, Man.....Yorkshires.
Stewart, A., Almonte.....Yorkshires.
Stewart, F. B., Espyville Station, Pa.....Yorkshires.
Stockton, H. M., Redgrave.....Yorkshires.
Story, F. W., Toronto.....———.
Stover, Jacob, Springford.....Chester Whites.
Strachan, Jno., Crandell, Man.....Yorkshires.
Straub, Adam, Elmira.....Yorkshires.
Stuart, H., Burford.....Yorkshires.
Sylvester, L. P., St. Theodore d'Acton, Que.....Yorkshires.
Taylor, Robt., Goodwood.....Yorkshires.
Taylor, Wm. H., Fleming, Sask.....Berkshires.
Teasdale, Thos., Concord.....Berkshires.
Telterley, Martin, Russell.....Yorkshires.
Tetvault, Alf.; St. Valerien, Que.....Chester Whites.
Thompson, Douglas, Woodstock.....Berkshires
Thompson, J., Sardis, B. C.....Chester Whites.
Thompson Bros., Swarthmore, Sask.....Yorkshires.
Thomson, C. L., Three Hills, Alta.....Tamworths.
Thomson, Adam, Shakespeare.....Berkshires.
Thomson, A., Roden, Man.....Berkshires.
Thomson, J. C., Mildmay.....Yorkshires.
Thouin, Louis, Repentigny, Que.....Yorkshires.
Thnell, Wm. C., Brussels.....Berkshires.
Thurston, R. E., Bobcaygeon.....Yorkshires.
Tibbits, Geo., Cowansville, Que.....Tamworths.
Tibbits, Jno. W., Knowlton, Que.....Yorkshires.
Todd, J. W., Corinth.....Berkshires.
Touchette, Wilfrid, St. Jean Baptiste de Rouville, Que.....Yorkshires.
Tourigmy, Paul, Victoriaville, Que.....Berkshires.
Tran, Geo J., Cedar Grove.....Yorkshires.
Tran, W. H., Cedar Grove.....Yorkshires.
Trann, W. L., Crystal City, Man.....Tamworths.
Trappists, Les Reverends Peres, Mistassini, Que.Yorkshires.
Tremblay, Geo., Baie St. Paul, Que.....Chester Whites.
Tregillus, W. J., Calgary, Alta.....———.
Tunbull, T., Manitou, Man.....Yorkshires.
Tuttle, Jud., Iroquois.....Yorkshires.
Vance, Robt., Ida.....Berkshires.
Vance, A. D., Prescott.....Yorkshires.
Vanderlip, H. M., Cainsville.....Berkshires.
Van Horn, Sir Wm., Montreal, Que.....Yorkshires.
Vokes, Chas., Quill Lake, Sask.....Yorkshires.
Wait, John T., Arnprior.....Chester Whites.
Walker, M. E., Glencoe.....Chester Whites.
Wallace, Wm. A., Kars.....Berkshires.
Wallace, R. M., Kars.....Berkshires.
Walsh Bros., Babcock Hill, N. Y.....Yorkshires.
Washington, F. J., Weyburn, Sask.....Yorkshires.
Watson, A. R. M., Weyburn, Sask.....Berkshires.
Watson, Chris., Prosperity, Lulu Island, Sask..Yorkshires.
Webb, Horatio, Sardis, B. C.....Yorkshires.
Webber, W. H., Lakelet.....Yorkshires.
Weightman, M. C., Menteith, Man.....Yorkshires.
Weiler, A. M., Wetaskiwin, Alta.....Yorkshires.
Weir, J. & Son, Paris.....Berkshires.
Wells, A. C. & Son, Sardis, B. C.....Yorkshires.
Westney Bros., Audley.....Yorkshires.
White, R. E., Balderson.....Yorkshires.
White, O. J., Hamiota, Man.....Yorkshires.
White, J. W., Ford's Mills, N. B.....Yorkshires.
Wigg, Wm., Lewisville, Alta.....Berkshires.
Wiggins, Henry, Nottawa.....Yorkshires.
Wight, Gus., Napinka, Man.....Berkshires.
Willis, Amos, Gorrie.....Yorkshires.
Wilson, Clarence C., Hawkestone.....Yorkshires.
Wilson, J. & Son, Fergus.....Yorkshires.
Wilson, J. C., Sine.....Tamworths.
Wilson, J. J., Milton.....Berkshires.
Wintle, Gilbert S., Richmond, Que.....Chester Whites.
Woodnoiss, E. Sydney, Binscarth, Man.....Berkshires.
Woodward, F., Fernhill.....Yorkshires.
Wright, J. B., Wheatley.....Berkshires.
Wright, Wm., Oakdale.....Chester Whites.
Wright, W. E., Glanworth.....Chester Whites.
Wylie Bros., Cardinal.....Yorkshires.
Young, Walt., Minto, Man.....———.
Yuill, A. C., Carleton Place.....Berkshires.

MEMBERS' OF THE WESTERN ONTARIO POULTRY ASSOCIATION AND VARIETIES ENTERED, WINTER FAIR 1907.—*Continued.*

Name and Address.	Variety.
Hamilton, Jas. R., 29 Orchard St., London..	Black Orpingtons.
Handley, Jno., Galt.....	Partridge Cochins, Rhode Island Reds, Indian Games any variety, Leghorns.
Harron, J. A., Crosshill.....	Buff Plymouth Rocks, Buff Leghorns.
Hart & Grimoldby, Frost St., Owen Sound,.	Pyle Game Bantams.
Hatton, J. & T., 780 Dundas St., London .	Pigeons.
Hay, Lorne, Owen Sound.....	White Plymouth Rocks.
Hedden, Arthur, 432 Waterloo St., London.	Partridge Wyandottes.
Hellyer, A. W. E., Belmont Ave., Ottawa South.....	Buff Orpingtons.
Henderson, G. G., Prospect St., Hamilton...	S. C. Brown Leghorns.
Hewett, Ernest A., 10 Clinton St., Guelph..	White Plymouth Rocks, A. O. V. Canaries.
Hiawatha Pigeon Lofts, 635 St. Patrick St., Ottawa.....	Pigeons.
Hill, Jos. J., 905 Maitland St., London....	Pekin Ducks.
Hintonburg Poultry Yards, Ottawa.....	Silver Laced Wyandottes, Rhode Island Reds, Black Orpingtons.
Hockin, Chas. London	Barred Plymouth Rocks.
Hodge, J., 20 Ben Lamond Ave., East Toronto	Barred Plymouth Rocks.
Hodgens, W. T., Knollwood Park, London..	Pigeons.
Hodgkin, F. W., 29 Edwin St., Guelph.....	Black Leghorns, Canaries.
Hoffman, H. A., Ridgetown.....	Buff and Black Orpingtons.
Hogarth, Wm. E., Hensall	White Plymouth Rocks, S. C. White Leghorns.
Holmhurst Poultry Yards, Whitby.....	Buff Cochins.
Hoover, M. R., Locust Hill.....	Barred Plymouth Rocks, R. C. White Leghorns.
Hope, J. R., Villiers.....	Golden Laced Wyandottes.
Howard, Geo., Box 937, Guelph.....	Andalusians, A.O.V. Bantams.
Howard, W., Guelph.....	Black Wyandottes, Bantams.
Hughes & Burns, County Bldgs., London...	Rhode Island Reds.
Hurd, H. J., Berlin.....	Buff Wyandottes, Orpingtons.
Hume, A. G., 260 Lee Ave., Toronto.....	.....
Irwin & Yelland, 80 Forward Ave., London	Leghorns.
Isbell, J. T., 33 Radenhurst St., Toronto...	Bantams.
Johnston, R., Box 62, Guelph	Wyandottes.
Karn, H., 174 Water St., Guelph.....	A.O.V. Ducks.
Kerns, Leslie, Freeman	Barred Plymouth Rocks.
Kiley, T. J., 855 Maitland St., London.....	Bantams.
Kinder, G. W., Box 29, Strathroy	Barred Plymouth Rocks, Rhode Island Reds, Red Caps.
King, T. & Johnson, Appin.....	Geese.
Kemp & Waterman, 39 Elmwood Ave., London	White Wyandottes, Black Orpingtons.
Klager, J. E., Queen St., Hespeler	Rhode Island Reds.
Knight, Alfred, Box 103, Davisville	Pigeons.
Knight, Isaac T., Waterloo Rd., Guelph....	Barred Plymouth Rocks, Cayuga and Muscovy Ducks.
Knight, W. R., Bowmanville.....	Javas, Andalusians, Houdans.
Kronse, F. W., Box 587, Guelph	Barred Plymouth Rocks, White and Silver-laced Wyandottes, Black Javas, Dorkings.
Laidlaw, J. R., Paisley	S.C. White Leghorns.
Lapsley, Geo. C., Kirkwall.....	S.C. & R.C. Rhode Island Reds.
La Rose, Chas., Cornwall	Indian Games.
Lawless, Thos., 293 Hill St., London.....	Barred Plymouth Rocks.
Lawrie, G. J., Maple	Dark Brahmas, Partridge Cochins, S.C. Brown Leghorns, White Minorcas, Polands, Bantams, Game Bantams, Geese, Ducks, Canaries.
Lemon, E , 10 St. Albans St., Toronto.....	Pigeons.
Lennon, W., Lynden	Wyandottes.
Liddon Bros., Inwood	Games.
Loehr, Erhard, New Hamburg	Silver-pencilled Wyandottes.
Logan, Jas. J., Box 50, Morrisburg.....	White Orpingtons.
Luscombe, Jno., Merton	S.C. and R.C. Rhode Island Reds.
Lush, H. T., 182 Dublin St., Peterborough.	S. C. Brown Leghorns, Buff Orpingtons. S.P. Hamburgs.
Luxton, A. G. H., Milton West.....	Dominiques, Turkeys, Geese, Ducks.

MEMBERS' OF THE WESTERN ONTARIO POULTRY ASSOCIATION AND VARIETIES ENTERED, WINTER FAIR 1907.—*Continued.*

Name and Address.	Variety.
Macpherson, Jno., 57 Dundas St., London..	Golden-laced and Partridge Wyandottes.
Magill, J. H., Port Hope	Golden-laced Wyandottes, Pigeons.
Martin, Jno. S., Port Dover.....	White Wyandottes.
Massie, C., Port Hope	White Wyandottes, Buff Orpingtons.
Meadowbrook Farm, Box 17, Eagle Bridge, New York.....	Houdans.
Middlemiss Robt. C., 120 William St., Brantford	Columbian Wyandottes, W.C.B. Polands.
Miles, Mrs. Joseph, Norwich	Dressed Poultry.
Mihm. Wm. J., 1 Richardson St., Guelph..	Rhode Island Reds.
Millard, I K., Box 173, Dundas	Barred Plymouth Rocks.
Milne, Geo. J., Mill St. South, Oshawa	Buff Orpingtons.
Minshall, J. H., 22 James St., Brantford...	S.C. and R.C. Black Minorcas.
Mitchell, Douglas, 4 Edinburg Rd., Guelph.	Pigeons.
Moebus, W. & Son, E. Summerhill, Ave., Toronto	Buff Wyandottes.
Monahan, Wm., 145 Duchess St., London ..	Partridge Wyandottes.
Monk, J. D., Springford	Geese.
Monroe, Geo. E., Forest	White Plymouth Rocks.
Moore, F. H. J., 201 Cannon St. E., Hamilton	White Orpingtons.
Moore, D., 85 Amelia St., Toronto.....	Bantams.
Morgan, A. J , 264 Dundas St., London ...	R. C. White Leghorns.
Morrow, Jno., Colborne.....	Light Brahmas.
Mounce, J. E., Armstrong Mills	Dressed Poultry.
Moyer, A. C., Waterloo	Minorcas.
Murdie, R. G., Seaforth	White Plymouth Rocks, Brze. Turkeys, Pekin Ducks.
Murray & Son, Brockville	Orpingtons.
Murray, W. G., Strathroy	Cochins, Bantams.
McAree, J. V., "Fairview," Mimico.....	Pigeons.
McCormack, Jas. M., Rockton.....	Barred Plymouth Rocks, Dorkings, Geese, Ducks.
McCormack, J. L., 33 Murray St., Brantford	S. C. White Leghorns.
McCue, P. J., 892 Waterloo St., London...	Columbian Wyandottes.
McCurdy, R., 176 Oxford St., London.....	Black Langshans.
McDiarmid, Jas. S., Box 274, Ingersoll	White Wyandottes.
McDonald, W. R., Petrolia.....	Buff Wyandottes.
McDougall, A. & Son, Box 195, Milton.....	Brze. Turkeys, Geese.
McGlennan, W. W., Colborne.....	Silver Grey Dorkings.
McInnis, G. A., Prescott	S. C. Black Minorcas, Japanese White Bantams.
McIntosh. G. E., Forest	Light Brahmas.
McKee, Harry, Norwich	Silver Gray Dorkings.
McKinstry, R. E., 68 First Ave., Glebe, Ottawa	Pigeons.
McLeod, W. J., 24 Evergreen Ave., London.	Black Leghorns.
McMaster, W. A., Guelph.....	Rhode Island Reds, Polands
McNeil, Wm., 778 Waterloo Rd., London ..	Polands, A.O.V. Fowl.
Nantel, W. B., St. Jerome, Que.	Brahmas, Cochins.
Neely, Jno., Seaforth	White Wyandottes.
Neville, F. E., 52 St. George St., Guelph...	Andalusians.
Nixon Bros., Woodbank	Games, Indian, any variety.
O'Connor, D. C., 41 North St., Guelph	White Wyandottes.
Oke, Richard, Box 361, London	Partridge Cochins, S. S. Hamburgs, Bantams, Javas, R. C. White Leghorns, Creve Coeurs, La Fleche, Hamburgs, Sultans.
Orr & Creedon, 54 Albion St., Brantford....	S. C. Brown Leghorns.
Osborne, W. M., Brockville	Minorcas.
Parrott, Thos., Maple St., Collingwood	Black Red Games.
Partlo, H. W., Ingersoll, Ont.....	Light Brahmas, Brahma Bantams.
Paul, J. K., Sebringville..... ..	Buff Orpingtons.
Pearson, Wm. H., 249 Suffolk St., Guelph.	Rhode Island Reds, Games, Game Bantams.
Philpot Bros., 45 Surrey St., Guelph	A.O.C. Langshans, Rhode Island Reds. Cochin White Bantams.
Pickering, E., 74 Stephenson Ave., East Toronto.	....
Pickering, E. A., Willowdale.....	White Wyandottes.
Player, W. J., Galt	S. C. Brown Leghorns.

MEMBERS' OF THE WESTERN ONTARIO POULTRY ASSOCIATION AND VARIETIES ENTERED, WINTER FAIR 1907.—*Continued.*

Name and Address.	Variety.
Pletsch, Jno., Shakespeare	S. C. White Leghorns, S. C. Brown Leghorns, Andalusians.
Pond, R. H., 130 Victoria St., Woodstock	Buff Orpingtons.
Pranschke, W. C., Ottawa East	Columbian Wyandottes.
Pringle, Jno., 187 Worthy Rd., London	Barred Plymouth Rocks.
Rawlings, E. A., Forest	Black Orpingtons, Cochin Black Bantams.
Readwin, A. & T., Guelph	Wyandottes, Leghorns, Pigeons.
Reaman, Wm. H., 8 Vivian St., Toronto	
Rebstock, W. J., Ridgeway	Black Orpingtons.
Reid, W. H., 35 Union St., Kingston	Dorkings, Game Bantams, Bantams, Pigeons.
Reith, Alex., Box 185, Lucan	Rhode Island Reds, S. C. White Leghorns.
Rice, Thomas, Whitby	White Plymouth Rocks, S. C. White Leghorns, Buff Orpingtons.
Ridler, L., 254 Suffolk St., Guelph	Pigeons.
Rife Bros., Hespeler	White Plymouth Rocks.
Roberts, Jno. W., Box 187, St. Thomas	Black Red Games.
Robertson, Geo., Box 242, Ottawa	Plymouth Rocks, Indian Games any variety, Andalusians, Dorkings, R. C. White Leghorns, Black Leghorns, Spanish.
Robertson, Geo. A., St. Catharines	White Plymouth Rocks, Black Red Game Bantams.
Robinson, A., 34 Elora St., Guelph	Pigeons.
Rook Bros., King St., Prescott	Black Red, Duckwing and Birchen Game Bantams.
Rooke, Joseph & Son, 117 Wellington Rd., London	White Wyandottes, S. C. White and S. C. Brown Leghorns.
Ross, Harry A., 91 Waterloo Ave., Guelph	White Wyandottes, S. Sebright Bantams.
Rosser Bros., 60 Close Ave., Toronto	Cochin Buff Bantams.
Ruby, H. S., Midland	S. C. White Leghorns, Houdans.
Sage, L. C., London	Brahmas, Partridge Wyandottes.
Samuel, J. Hughes, Norway	Buff Wyandottes.
Sanderson, Jacob C., St. Thomas	Buff Wyandottes, Buff Orpingtons.
Saunders, Teddy, 592 Maitland St., London	Silkies.
Scanlan Bros., Ennotville	Geese, Ducks.
Schelly Bros., Brantford	Columbian Wyandottes.
Scott, Peter, Box 227, Guelph	S. C. Brown Leghorns.
Scott, T. H., 39 Elgin St., St. Thomas	Wyandottes, Ducks.
Scott, Rev. W. N., Athens	Silver-pencilled Wyandottes.
Shaw, Frank, 75 Hughes St., St. Thomas	Black Sumatra Games.
Shaw, Jno., McE., Forest	White Plymouth Rocks.
Shea, Thos. M., Fergus	Geese, Ducks.
Shepardson, Geo. M., Sombra	White Plymouth Rocks.
Sherlock, Thos., 945 Lorne Ave., London	Pyle Games, Duckwing Game Bantams.
Sherlock, C. E, 3 Fern Ave., Toronto	
Sheward, Bert., 133 Neeve St., Guelph	Pigeons.
Shorey, P. D., Newburg	Buff Cochins.
Sims, Thos. W., Thamesville	Columbian Wyandottes.
Slessor, W. J., 520 Adelaide St., London	S. Sebright, Cochin White and Cochin Black Bantams.
Smiley, S. H., St. Thomas	Rhode Island Reds.
Smith, Jos. R., Strathroy	Black Wyandottes.
Smith, Wm., 308 Kingston Road	
Snider, W. W., St. Jacobs	Barred Plymouth Rocks.
Soole, A. F., Seaforth	Columbian Wyandottes.
Spencer, Rev. R. A., Hillsdale	Wyandottes.
Spires Bros., 59 Devonshire St., Guelph	Duckwing Game Bantams, S. Sebright Bantams.
Spry & Mick, 142 Dundas St., Toronto	Buff Wyandottes.
Straib, Jacob, West Lorne	S. C. Brown Leghorns.
Stainsby, A. E., 58 Oxford St., Toronto	
Sutherland, A. D., Seaforth	Buff Wyandottes.
Syer, E., Milton	S. C. White Leghorns.
Traplin, Thos. O'C., Hespeler	White Wyandottes, Orpingtons.
Trimble, Geo., 35 Dundas St. E., Toronto Jct	Pigeons.
Teale, Wm. J., 21 McTague St., Guelph	Langshans, Games, Bantams, Pigeons.

MEMBERS' OF THE WESTERN ONTARIO POULTRY ASSOCIATION AND VARIETIES ENTERED, WINTER FAIR 1907. —*Concluded*.

Name and Address.	Variety.
Telfer Bros., Milton West	Games.
Thorpe, J. M., 41 Briscoe St., London	Silver-pencilled Wyandottes.
Tilt, C. A. R., Doon	Dark Brahmas, Black Langshans, Cochin Buff Bantams, Cochin Black Bantams, Geese, Ducks.
Topping & Finchamp, Woodbank	Games, Indian.
Tyson & McMaster, Guelph	Game Bantams.
Vrooman, D. J., 573 Grey St., London	Pigeons.
Vrooman, W. J., c/o Cockshutt Plow Co'y., Brantford	Buff Leghorns.
Waddell, Miss Beula, St. Thomas	Black Orpingtons.
Wales, F., Milton	Partridge Cochins, S. C. White Leghorns.
Walker, W. R., 43 W. Surrey St., Guelph	Black Red, Brown Red Game Bantams.
Wankle, Emil, Waterloo	Rhode Island Reds.
Warrington, J. H., Cornwall	Spanish, Dorkings, Creve Coeurs, Polands, Red Caps.
Wells, E. Jr., 452 Ottaway Ave., London	Red Caps.
Westbrook, James H, 653 Dundas St., London	Bantams.
Westbury, Frank H., 920 Elias St., London.	Barred Plymouth Rocks.
Wheadon, R. L., 166 London Rd., Guelph	S. C. Black Minorcas, Bantams.
Willis, Frank L., Seaforth	Columbian Wyandottes.
Wilson, Wm. C. & Son, Hawkeston	Brahmas, Partridge Cochins, R. C. Brown Leghorns.
Wilson, Wm., 219 Grange St., Guelph	Wyandottes.
Wismer, Henry F., Kingsmill	Aylesbury Ducks.
Wixon, F., Galt	
Woodrow & Sons, Beaconsfield, Ont.	Turkeys, Geese.
Wolfe, W. J., 486 Givens St., Toronto	
Woodward, F. A., 131 Bay St., Toronto	Pigeons.
Woodward Poultry Farm, Box 412, London.	Plymouth Rocks, Rhode Island Reds, Geese.
Worrod, Thos., Angus	Bronze Turkeys.
Worthy, Jos. A., 58 Riverdale Ave., Toronto	Pigeons.
Wright, W. E., Glanworth	Red Caps, Turkeys.
Wright Bros., Brockville	White Wyandottes.
Wyatt, Hugh, London	Buff Cochins.

MEMBERS OF THE EASTERN ONTARIO POULTRY ASSOCIATION AND VARIETIES ENTERED AT THE EASTERN ONTARIO LIVE STOCK AND POULTRY SHOW, 1908.

Name and Address.	Variety.
Aird, P. E., Montreal Annex, Que	Buff Orpingtons.
Alexander, Dr. D. B., Shawville, Que	Buff Orpingtons.
Alexander, G. W., Beachburg	Barred Plymouth Rocks.
Allison, Clarence, Box 158, Brampton	Buff Wyandottes.
Annand, W. J., 28 Metcalf Sq., Ottawa	White Orpingtons.
Arnold, W., 100 Wellington St., Ottawa	White Wyandottes.
Baptie, Jas., Springville	Silver Wyandottes, Hamburgs.
Barber, W., 118 Roncesvalles Ave., Toronto.	Games, Game Bantams.
Beckstead, F. W. Morrisburg	Barred Plymouth Rocks.
Bedlow, Jno., Brockville	Silver Gray Dorkings, Pekin Ducks.
Belanger, J. P., 48 Bell St., Ottawa	S. C. White Leghorns.
Belford, J. A., 22 Creighton St., Ottawa	White Orpingtons, Pigeons.
Benjamin, E. H., 108 Besserer St., Ottawa	Old English or Pit Games.
Benson, J. A., Billing's Bridge, Ont	White Minorcas.
Blakely, R. E., 68 John St., Ottawa	Buff Wyandottes, Pigeons.
Bogue, G. & J., Strathroy	Cochins, Wyandottes, Javas, Spanish, Dorkings, Houdans, Creve Coeurs, La Fleche, Hamburgs, Polands, Bantams, Ducks.
Bradley, Rd., Carlsbad Springs	White Wyandottes.
Briggs, F. M., 572 Adelaide St., London	Bantams.
Brill, L. A., 737 Princess Ave., London	Bantams.

MEMBERS' OF THE EASTERN ONTARIO POULTRY ASSOCIATION AND VARIETIES ENTERED AT THE EASTERN ONTARIO LIVE STOCK AND POULTRY SHOW, 1908.—*Continued.*

Name and Address.	Variety.
Brown, Galt E., Point Fortune, Que	Light Brahmas, White Wyandottes, Games, Black Minorcas, Buff Orpingtons, Hamburgs, Polands, Bantams.
Burgess, J., Chelsea Green	Langshans.
Byshe, Herbert, 166 Bank St., Ottawa	S. C. White Leghorns.
Capital Pigeon Lofts, 158 Nelson St., Ottawa.	Pigeons.
Carleton, W. H., 110 Stanley, Ave., Ottawa,	S. C. White Leghorns.
Chisholm, F., Philipsville	Barred Plymouth Rocks.
Clark, H., 267 East Ave., Ottawa East	Silver Wyandottes.
Cocks, W. G., 167 Oak St,, Toronto	Pigeons.
Collins, G. H. A., Cummings Bridge, Ottawa.	S. C. Brown Leghorns.
Cornish, C. C., 359 Somerset St., Ottawa	Light Brahmas, Black Red Game Bantams, Buff Cochin Bantams, Pigeons.
Cumming, D., Russell	Buff Plymouth Rocks, Games, Leghorns, Hamburgs, Turkeys, Geese, Ducks.
Dalglish, Jas. A., % Jno. M. Garland Son & Co., Ottawa	Rhode Island Reds.
Delary, Wm., 241 Russell Ave., Ottawa	Silver Wyandottes.
Dickson, Wm., Winchester	Black Minorcas.
Doidge & McNeil, 30 Cartwright St., London	Game Bantams, Bantams.
Donovan, H. B., 14 Bank St., Toronto	Game Bantams, Bantams, Doves.
Dynes, Alex., Hintonburg	Barred Plymouth Rocks, Pekin Ducks
Edwards, Wm. H., 420 Danforth Ave., Toronto	White Plymouth Rocks.
Ellis, Wm., Prescott	Black Minorcas, Buff Orpingtons.
Ellis, Rev. Jno. D., Renfrew, Ont	S. C. Buff Leghorns.
Fallis, R., Box 7, Ottawa South	White Wyandottes.
Fidler, J. E., Brockville	Barred Plymouth Rocks, Partridge Wyandottes.
Flanigan, Thos., Cornwall	S. C. Buff Leghorns, Black Minorcas, A. O. S. V. Bantams.
Flawn, Alfred, 130 Horton St., London	Black Cochins, Silver Wyandottes.
Fortier, Joseph, St. Scholastique, Que	Plymouth Rocks.
Francis, G. W., Osgoode Station	Barred Plymouth Rocks, White Leghorns, White Cochin Bantams.
Frith, E. R., Maxville	Wyandottes, Old English or Pit Games, Black Minorcas, Pigeons.
Fulford, Henry, Manhard	Plymouth Rocks, Wyandottes, Leghorns, Spanish, Andalusians.
Giroux, Regis, Cornwall	Silver Wyandottes, Black Javas, Houdans.
Gurney, W. A., 908 Princess Ave., London.	Barred Plymouth Rocks, S. C. Brown Leghorns.
Guy, G. T., 180½ Bank St., Ottawa	Barred Plymouth Rocks.
Halliday, Wm., Spencerville	Houdans.
Hellyer, A. W. E., Belmont Ave., Ottawa, South	Buff Orpingtons.
Hiawatha Pigeon Lofts, 635 St. Patrick St., Ottawa	Pigeons.
Higman, Geo., Sr., 61 Sussex St., Ottawa	Wyandottes, Faverolles.
Higman, Geo., Jr., 97 College Ave., Ottawa.	Partridge Wyandottes.
Hintonburg Poultry Yards, Ottawa	Plymouth Rocks, Wyandottes, Rhode Island Reds, Leghorns, Minorcas, Orpingtons, Bantams.
Hunt, B. J., Park Ave., Ottawa South	White Wyandottes.
James, F. A., 153 Centre St., Ottawa	Barred Plymouth Rocks.
Kyle, E. J., Merrickville	Barred Plymouth Rocks, White Wyandottes.
Laidlaw, Jas. M., 198 Bronson Ave , Ottawa.	Rhode Island Reds.
Lake, G., 155 Russell Ave., Ottawa	White Wyandottes.
Lambertus, Jno. A., Eganville	Barred Plymouth Rocks.
La Rose, Chas., Cornwall	Cochins, Barred Plymouth Rocks, Games, Leghorns, Andalusians.
La Trappe Agricultural Institute La Trappe, Two Mountains Co., Que	Barred Plymouth Rocks, Buff Plymouth Rocks, White Wyandottes, Rhode Island Reds, S. C. White Leghorns, Black Minorcas, Buff Orpingtons, Bantams, Pekin Ducks, Pigeons.
Leroux, G. R., Cornwall	Rhode Island Reds, S. S. Hamburgs, Pyle Game Bantams.

MEMBERS' OF THE EASTERN ONTARIO POULTRY ASSOCIATION AND VARIETIES ENTERED AT THE EASTERN ONTARIO LIVE STOCK AND POULTRY SHOW, 1908.—*Concluded.*

Name and Address.	Variety.
Logan, Jas. J., Box 50, Morrisburg	White Orpingtons.
Magill. J. H., Port Hope	Golden Wyndottes, Pigeons.
Mason, Jno., 188 Turner St., Ottawa	Buff Plymouth Rocks, Buff Wyandottes, Buff Orpingtons.
Matheson, G. M., 69 Russell Ave., Ottawa	Partridge Wyandottes.
Mills, James, Noel St., Ottawa	Rhode Island Reds.
Moyer, A. C., Waterloo	White Minorcas.
Mulville, James V., Westport	Buff Orpingtons.
McDougall & Vout, Brockville	White Wyandottes, Buff Orpingtons, Houdans.
McFall, Geo. E., 234 Preston St., Ottawa	Rhode Island Reds.
McGinnis & Mailhot, Iberville, Que	Barred Plymouth Rocks, Wyandottes, S. C. Brown Leghorns, Polands, Game Bantams, Geese, Ducks, Bantams, Belgian Hares.
McInnis, G. A., Prescott	Black Minorcas, Bantams.
McIntosh. Dr. P. A., Spencerville	Dark Brahmas, Langshans, Plymouth Rocks, White Wyandottes, Rhode Island Reds, Pyle Games, S. C. Buff Leghorns, White Minorcas, Orpingtons, Houdans, Faverolles.
McKellar, Donald, Hawkesbury	S. C. White Leghorns.
McKinstry, R. E., 68 First Ave., Glebe, Ottawa	Buff Plymouth Rocks, Pyle Game Bantams, Pigeons.
McLaurin, T. G., 42 Stanley Ave., Ottawa	White Orpingtons.
McNeil, Wm., 778 Waterloo St., London	Polands.
Nantel, W. B., St. Jerome, Que	Brahmas, Cochins, Games, Faverolles.
Neate, M. C., 33 Sussex St. Ottawa	Barred Plymouth Rocks.
Oke, Richard, Box 361, London	Partridge Cochins, R. C. Leghorns, Creve Coeurs, La Fleche, Hamburgs, Bantams.
Osborne, W. M., Box 472, Brockville	S. C. Black Leghorns, White Minorcas.
Palen, R., 107 Arlington Ave., Ottawa	Rhode Island Reds.
Partlo, H. W., Ingersoll	Light Brahmas.
Peaker, J. M., 75 McKay St., Ottawa	Black Minorcas.
Peaker, Morley, 75 McKay St., Ottawa	Buff Cochins.
Peter, Jno. S., 157 Mutchmore St., Ottawa	Buff Orpingtons.
Plant, W., 526 Wellington St., Ottawa	Cochins, Buff Bantams, Pigeons.
Pritchard Bros., North Wakefield, Que	Light Brahmas, Buff Cochins, Langshans, Games, Leghorns.
Readwin, A. & T., 236 Paisley St., Guelph	Leghorns, Pigeons.
Reid, W. H., 35 Union St., Kingston	Cochins, Langshans, Wyandottes, Javas, Games, Leghorns, Orpingtons, Dorkings, Houdans, Game Bantams, Bantams, Ducks, Pigeons.
Reid, R. & Co., Hintonburg	Toulouse Geese, Pekin Ducks.
Robertson, Geo., Box 242, Ottawa	Plymouth Rocks, White Wyandottes, Javas, Games, Leghorns, Spanish, Andalusians, Dorkings, La Fleche, Faverolles, Polands, Ducks, Belgian Hares.
Robertson, Edw. S., Beachburg	White Wyandottes.
Rook Bros., Prescott	Game Bantams.
Samuel, J. Hughes, Norway	Buff Wyandottes.
Saunders, E., Maitland St., London	Silkies.
Scott, Rev. W. N., Athens	Wyandottes.
Sinclair, P. D., Maxville	Bronze Turkeys, Geese, Ducks.
Slessor, W. J., 520 Adelaide St., London	Bantams.
Slinn, W. H., 208 Patterson Ave., Ottawa	Orpingtons.
Snelling, W. H., Rockcliffe Park, Ottawa	Orpingtons.
Snetsinger, Jas., Eamers Corners	Dark Brahmas, Plymouth Rocks, Wyandottes, Javas, Leghorns, Pekin Ducks.
Stiles, Rev. Thos. J., Cornwall	White Wyandottes.
Stillie, David, Box 310, Almonte	Hamburgs.
Thompson, A., Allan's Corners, Que	Turkeys, Geese, Ducks.
Tomalin, Joseph, 593 Ossington Ave., Toronto	White Plymouth Rocks, Black Minorcas.
Tooker & Bowey, Brockville	Cochins, Wyandottes.
Warrington, J. H., Cornwall	Game, S. C. Black Leghorns, Spanish, Dorkings, Creve Coeurs, La Fleche, Polands.
Zavitz, L. V., 81 Fourth Ave., Ottawa	Black Minorcas, S. Sebright Bantams.

REPORT

ON THE

Reforestation of Waste Lands

IN

Southern Ontario

1908

(PUBLISHED BY THE ONTARIO DEPARTMENT OF AGRICULTURE, TORONTO)

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1909

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TORONTO

To the Honourable JOHN MORISON GIBSON, K.C., LL.D., etc., etc., etc.,
Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the pleasure to present herewith for the consideration of your Honour the Report on the Reforestation of Waste Lands in Southern Ontario.

Respectfully submitted,

JAMES S. DUFF.

Minister of Agriculture.

TORONTO, 1909.

Fig. 1. Waste Lands in Southern Ontario.

REPORT

ON THE

Reforestation of Waste Lands in Southern Ontario

INTRODUCTION.

This report deals with the forest problem of Southern Ontario, that portion of the Province as shown in figure 1. The disappearance of the forest and woodlot throughout this region is a topic which has been widely and frequently discussed. Early in the eighties we find reports which were compiled at the instance of the Ontario Government, calling attention to the necessity of preserving and replanting forests in this region. Little heed was given to these reports so far as the adoption of any policy was concerned. We had not yet heard of such phrases as "timber famine prices." It seemed as though there existed inexhaustible supplies of white pine, and the manufacturers were still able to obtain, from Ontario sources, the greater part of their hardwood supply, which to-day is largely imported from the United States.

We have in Ontario two classes of lands which should be permanently managed for forest crops. First, there are the small isolated patches of non-agricultural soils to be found throughout otherwise good farm lands. These are sand, gravel or rock formations, steep hillsides, etc. The reclamation of these denuded and unimproved soils must depend upon local initiative, although Government assistance of an educational nature is advisable. The Department of Agriculture's co-operative distribution of planting material aims to assist the farmer in reforesting these waste soils. Second, there are the large, contiguous areas of non-agricultural soils which exist in many parts of the Province. Some of the most important areas are shown on map in figure 1.

This older portion of the Province is divided into two general classes of soil. The Laurentian formation indicated in figure 1, contains large areas unfit for agriculture. Much of this area consists of rocky out croppings with a soil lacking in lime, thus not naturally adapted to agriculture. This region contained magnificent white and red pine, with yellow (or black) birch, sugar maple and a number of other hardwoods. Much of the valuable white and red pine has been taken out of this area, and a large portion of this country has been badly burned. It is interesting to note that this Laurentian formation forms one of the important watersheds of Ontario.

Within this watershed are two areas reserved from settlement. Preservation of game, protection to the headwaters of streams and future wood supply were the chief arguments used in favour of making these reservations. Algonquin National Park was created a park or reserve by special Act of Parliament in 1893. It is a contiguous tract of land in the district of Nipissing, south of the Mattawa River, and contains a little over one million acres. This reservation embraces the headwaters of the Muskoka, Madawaska, Petewawa and other streams.

In 1899 another area on the watershed was reserved known as the Eastern Reserve and consisting of about 80,000 acres in the rear of the counties of Frontenac and Lennox and Addington. This was the first reserve created by Order-in-Council under the Forest Reserves Act of 1898.

The southern portion of older Ontario, with its rich agricultural lands, is chiefly a glacial deposit on limestone formation. It was originally covered with heavy forest. On the light, sandy soils white and red pine were the chief species, and in the better classes of soil many of the valuable hardwoods formed the forest growth. In the most southerly or Lake Erie portion existed splendid specimens of white ash, white wood, chestnut, black walnut, hickories, white oak, black cherry, etc. Remnants of stumps and a few large specimens still left testify to the character of the original growth in this old, agricultural part of Ontario.

To a large extent the only woodland left, in this settled portion of the Province, is the farmer's woodlot. At least forty-five townships have as low as five per cent. of woodland. In 1904 the municipal assessors' returns gave less than fifteen per cent. of woodland for all the settled townships.

How many realize what the character of the growth is in a large proportion of this remaining woodland? It is practically impossible to buy, in any district in Ontario, commercial quantities of any of the more valuable hardwoods as white ash, rock elm, hickory, etc. Through severe culling, and opening the woodlot to cattle, much of the remaining woodlands are only remnants, with either defective or undesirable trees left.

The forest problem on private lands includes the better management of existing woodlands along with the replanting of waste portions of untillable soils. This will always be a most difficult problem. Private management of small parcels of forest land in older countries, as France and Germany, where the science of forestry has long been practised, is still very unsatisfactory. Owing to the long time element in maturing wood crops private management is too often weak and uncertain.

As indicated on the map in figure 1, we have throughout the older parts of the Province large bodies of sand lands which are not suited for agriculture. It is generally admitted, that these waste lands can be made permanently productive only by being managed for timber crops.

The only solution of this waste land problem is in a policy which has as its aim the gradual segregation of these lands, to be permanently managed as Provincial forests.

DESCRIPTIVE.

Before indicating reasons for adopting any policy, the following brief description of some of the non-agricultural lands in Southern Ontario will give the reader a general conception of existing conditions. The location of these areas may be seen on the map in figure 1, although the areas may not be proportionately exact.

Norfolk County.

Norfolk County contains two definite areas of sand lands unfit for agriculture, one being in Walsingham Township and the other in Charlotteville Township. It is quite safe to say that there are 10,000 acres in two contiguous areas, which must be finally placed under forest management.

Fig. 2. Scene at the border of the sand plains in Charlotteville Township.

Fig. 3. Normandale Plains in Charlotteville Township.

Early settlements began in Walsingham about 1791 and in Charlotteville in 1796. It is interesting to note that the first township is not yet wholly settled, as the Canada Company still holds land in the Township of Walsingham.

These lands originally produced splendid white pine, oak, chestnut and other valuable hardwoods. Where the land was cleared for farming purposes it gave at first, in many cases, good returns. As soon as the vegetable mould or old forest soil disappeared from the sand, it became a difficult matter to keep up the fertility and we find conditions as in the following illustrations:

Charlotteville Township contains a large proportion of this blow-sand type. There are several hundred acres which are gradually developing into sand dune formations. The area is increasing and preventive measures should be adopted in the near future. It is quite possible to reforest these areas, but the cost will be higher than on lands as shown in figure 3.

Figure 3 shows one type of waste land in Norfolk County. The area is covered with scrub oak and scattering white pine. The oak is chiefly yellow and red (*Quercus velutina* and *rubra*). Its dwarfed scrubby appearance is owing to poor soil conditions caused from frequent ground fires, and also owing to the fact that as soon as a tree reaches three or four inches in diameter it is cut for fuel wood. Ground fires periodically burn over this land. The old scrubby white pine and oak usually withstand these ground fires, but the young pine is killed. If fire were kept out, a large proportion of the area would reproduce with white pine. The scrub oak is a valuable asset to this land as it gives protection to the soil and improves it by adding a leaf litter.

In figure 4 we have land which was cleared for agriculture. This land has been ploughed and cropped, but the owner did not succeed in removing the stumps. The size and number of the stumps indicate what is possible on this land, under forest management. The sand dune forming in the background indicates what will eventually happen under agricultural management.

If forest management is applied at once it will be possible to reclaim this area at a low cost. If neglected it will soon develop conditions as shown in figure 2.

Figure 5 shows some remains of the forest which existed on these Walsingham lands. These soils, which dry out on the surface, and are thereby of little value for most agricultural crops, have abundance of moisture below the surface. As may be seen in figure 5 the roots of the white pine reach down and find the moisture.

Figure 6 illustrates a type, which forms a large proportion, of the Walsingham waste lands. After the lumberman took off the pine, fire followed, and to-day we have scrub oak with scattering white pine. If the ground fires were prevented these lands would naturally fill up with white pine. Considerable fence, post and fuel wood material could be taken at a profit from such areas. Such cutting should always be done, looking forward to a new growth of white pine on the high, poor sites. In the low areas, where better soil conditions exist, management should aim at producing hardwoods. In the swales throughout this area we find the hardwoods represented by oak, chestnut, white ash, various maples, cherry, hickory, walnut, etc. It will be very advisable, wherever soil conditions will permit, to aim for hardwood reproduction as the hardwood supply in Ontario will be a serious problem in the future.

Fig. 4. Blow sand area just forming in Walsingham Township.

Fig. 5. Near view of effects of clearing sand lands.

Lambton County.

In Lambton County, along the shore of Lake Huron, there is a belt of sand formation several miles in length, and varying in width from one-half mile to two miles. Considerable of this area is still held by the Canada Company. Practically no agricultural settlement has been attempted in this belt as the formation is largely a series of sand hills.

Figure 7 gives a general view of conditions existing in the Lambton County sand lands. As may be seen there is enough second growth existing, if protective measures were adopted, to secure good forest conditions. Notice the sand dune on the left side of the picture. This is pure sand and not a snow scene, as might be imagined.

The forest growth on these lands is chiefly red pine with scattering white pine. In the protected portions, where soil conditions are better, the important hardwoods are found. It is interesting to note that in this area is found the chestnut oak (*Quercus acuminata*), a species found only in the extreme southwestern portion of Ontario.

The shifting sand soon kills red and white pine, but there are some species, as shown in figure 8, which withstand the sand for a long time. Balsam poplar and sand willows, although gradually being covered by sand, send out new root systems and manage to keep their heads above the sand. Arbor vitæ or white cedar and the dwarf or trailing juniper are the only evergreens which seem able to withstand the sand. Another plant which plays an important part in holding the sand is a beach grass which may be seen in the foreground of figure 8. In protecting and reclaiming these areas these plants should play an important part.

Much of this Lambton County area presents a problem of protection rather than one of reforesting. Figure 10 shows an old scrubby red pine which is rapidly restocking the surrounding ground with young growth.

Simcoe County.

Simcoe County has at least three sand areas, all of which are of a different type from those previously described, the chief difference is that the sand seldom blows or shifts owing to its being coarser grained than the Norfolk or Lambton sands.

Figure 11 represents the pine plains near Angus. There is at least 50,000 acres in this district occupying parts of the Townships of Tossorontio, Essa and Sunnidale. This area produced some of the finest red pine ever cut in Canada. Several splendid streams flow through this district, and it is well suited for a game preserve as well as a wood producing proposition.

Here again fire protection is the problem rather than reforesting. A large proportion of the area has old scrubby seed trees of red and white pine which would soon give a splendid reproduction if it were not for the ever recurring ground fires. This autumn (1908) ground fires swept over a large tract near Angus.

Figure 12 shows the dead trees killed from ground fires which periodically sweep over these lands. Many under-estimate the damage done by these fires. They impoverish the soil by burning up the small amount of leaf litter and other materials which should go to form humus. Many of these fires destroy young seedling pine which are scarcely noticed by the average person. Now that attention is being directed towards replanting, it is high time that we recognize the potential value of these areas having young growth.

Fig. 6. Scrub Oak lands in Walsingham Township.

Fig. 7. General view of the sand hill formation along Lake Huron in Lambton County.

Fig. 8. View of shifting sand in Lambton County waste area.

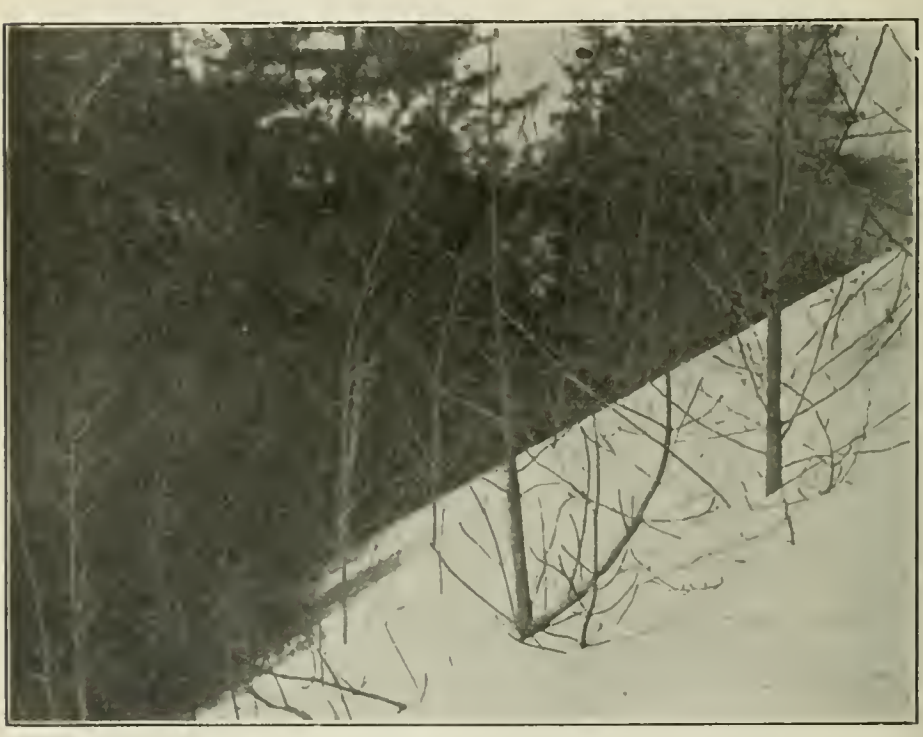


Fig. 9. Sand dune covering and killing the Red Pine. Some of the trees are covered to a height of about twenty feet.

Fig. 10. Natural reproduction of Red Pine in Lambton County.

Fig. 11. Pine Plains near Angus, Simcoe County.

Situated north of Craighurst and divided between Floss and Medonte townships there is an area of two or three thousand acres of land such as is shown in figure 13. This land lies about a small but very fine body of water known as Orr Lake. This land should be reforested and kept for the people of this locality if for no other purpose than that of a public pleasure ground.

There is another sand area in Simcoe County located in Vespra Township known as the "Midhurst Plains". This waste land is about five miles north-west from Barrie. This tract is about 5,000 acres in extent and is much the same as that shown in figure 13, except that it is very thickly covered with stumps.

Fig. 12. Effects of ground fires on young Red Pine in Simcoe County.

Northumberland and Durham.

Extending through Northumberland and Durham Counties is a sand formation locally known as the "Oak Ridge" or "Pine Ridge". The following illustration in figure 15 shows the general location of this sand area.

The watershed, as shown in figure 15, is not entirely waste land. The poorest land lies in an area beginning about a mile and a half west of Burketon on the Canadian Pacific Railway, and extends east to the end of Rice Lake, having a width varying from three-quarters of a mile to two miles. The whole of this area is by no means unsuited to agriculture for some good land will be found in isolated areas of small extent. It is safe to say that seventy-five per cent. is wholly unfit for successful farming.

It is of interest to notice in figure 15 the large number of small streams having their origin in these sandy areas. Many of them have almost ceased to exist, except for a short time during spring freshets.

Although few of these streams are large yet they are important for many reasons to the agricultural country through which they flow. They are also

Fig. 13. Orr Lake which lies in waste area in Simcoe County.

Fig. 14. Sand waste in Medonte Township, Simcoe County.

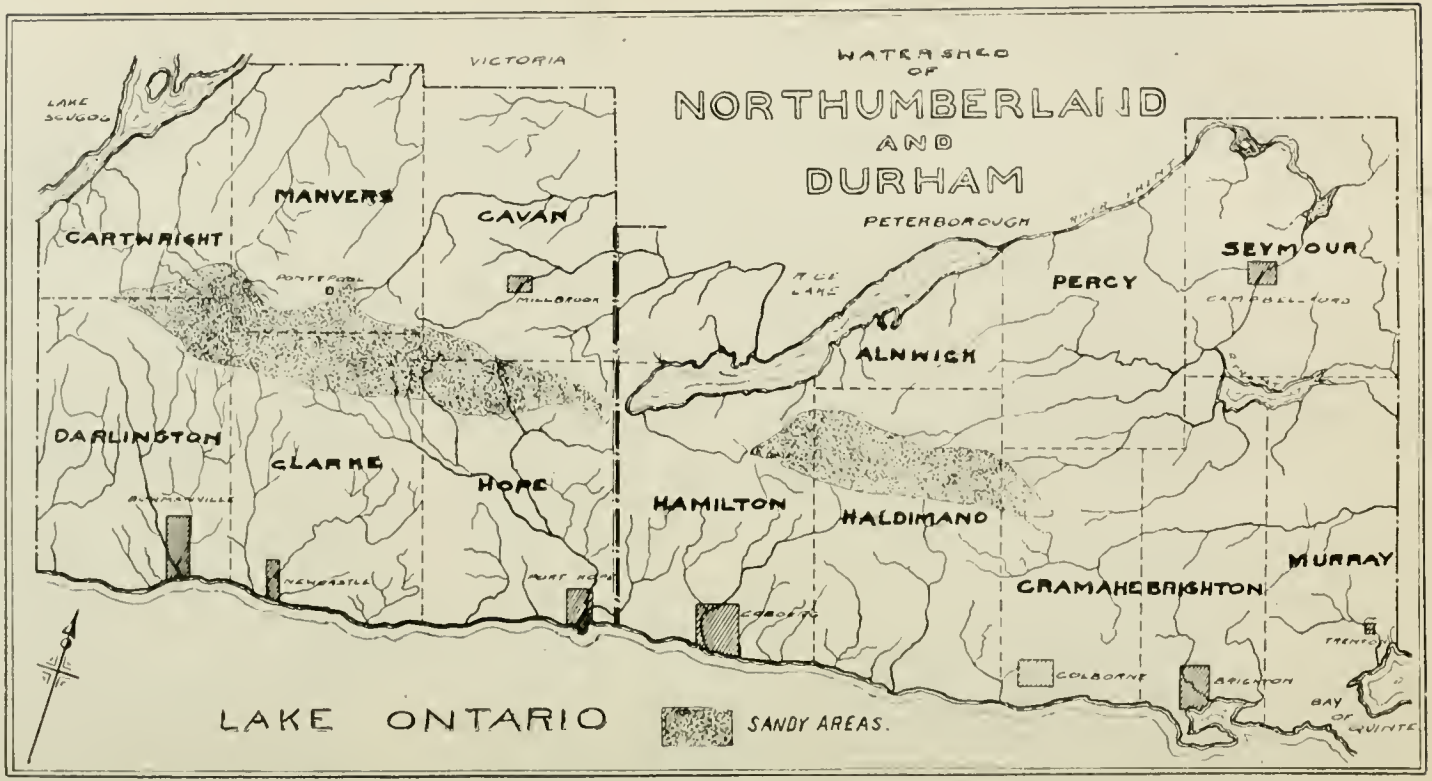


Fig 15. Map showing watershed of Northumberland and Durham in relation to sand lands.

important to many towns in this district as future sources of water supply. I am informed that these streams were originally well stocked with brook-trout. Their value simply as trout streams should prove a strong argument in favour of protecting their sources.

In Durham County, the largest contiguous area of poor land is in Clarke Township. The sandy land here takes in the whole of the tenth concession and the first twenty lots in the ninth concession. In this last concession there is an area of at least two thousand acres totally unsuited for agriculture.

In Northumberland County the largest contiguous area of poor land is in Haldimand Township, where at least 5,000 acres are available.

Other areas might be described in Bruce, Prince Edward and counties in the eastern end of the Province, but the above will give a general conception of existing conditions.

ARTIFICIAL PLANTING OF FORESTS.

In the following pages it is desired to point out the financial possibility of reforesting at a profit, rather than to discuss the actual methods of planting. In spite of the assertions of so called practical men, that nature will look after the replacing of the forest, the following is certain, that *on large areas where no seed trees of commercial species exist, it will be impossible to obtain satisfactory new growth within a reasonable time.*

In this publication all discussion of reforesting takes the following for granted:

Expenditures in replanting should be made only where there is reasonable fire protection.

At present, replanting should be done only where there is not the slightest chance of natural reproduction of desirable species.

There are two common methods of restocking blank areas with forest trees.

Seeding.—Where the seed is sown or planted directly on the areas to be restocked. This method is frequently adopted with the hardwoods and more especially the nut trees.

Planting.—Where the plant is procured from the nursery and transplanted into the area to be restocked. This method has been found desirable for most species and especially the evergreens or conifers. It is a prevalent opinion in this country that white pine could be easily reproduced throughout waste areas by simply planting or sowing the seed. In Germany and other countries experience points out that the use of the nursery grown plant is preferable, reasons for which space will not allow us to consider at this time. It will be advisable to experiment with artificial seeding, but at present we are concerned chiefly with artificial planting, with the use of nursery grown material.

Conditions may exist where reforestation will be advisable even at an initial loss. Forest planting is frequently done to fix soils on steep slopes or to prevent the development of sand dunes when the initial cost is too high to justify the work as a wood crop investment.

In considering reforesting as a financial investment the subject can be best discussed under the following topics.

Rate of Interest.

Cost of Land.

Cost of plant material.

Cost of planting.
Cost of management and protection.
Taxation.

Rate of Interest.—All expenditures made in producing a crop of trees must be charged against the crop. As a forest crop takes many years to mature, it is necessary to place the initial outlay at compound interest for the period, and also to compound the recurring, annual expenses.

In considering the investments as being under state management the rate of interest will be that at which it is possible for the Province of Ontario to obtain money. At present this rate may be placed a 3½ per cent.

Cost of Land.—The initial cost of the land must be placed at compound interest for the period in which it takes to produce the crop. By the initial cost is meant the soil value without buildings, and without inferior growth or other values which may encumber the land at the time of purchase. At the end of the period the accumulated interest should be charged against the crop, and not the initial cost of land as we still have the soil value after the crop is harvested.

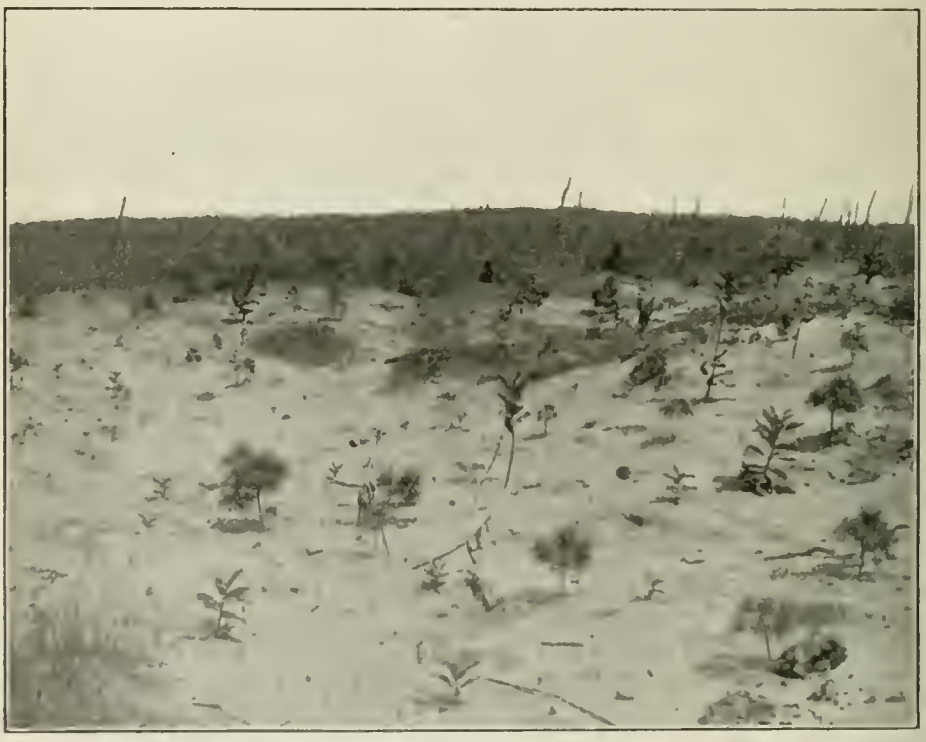


Fig. 16. Type of sand land in Durham County which has been replanted with White Pine and Scotch Pine.

Lands referred to in previous pages can be purchased at prices ranging from two to five dollars per acre for soil value.

Cost of Plants.—Cost of plant material can be considered by taking white pine as an example.

Two year old white pine seedlings, which are suitable for some conditions, can at present be imported from Germany and laid down at points in

Ontario for about one dollar per thousand. Three year old white pine transplants, which are stronger and necessary for certain conditions, can be imported for about three dollars per thousand.

It is quite possible to grow in our own nurseries two year old seedlings for one dollar and fifty cents per thousand and three year old transplants for three dollars and fifty cents per thousand.

It will be preferable to use native grown plants in future work, and the cost can be brought below the above figures. It would be a conservative estimate to place the cost of plant material for the average conditions at five dollars per acre.

Cost of Planting.—Cost of planting depends upon quality of labour and nature of soil to be planted. By spacing the plants about five feet apart in light, sandy soil, it might be possible for two men to plant an acre per day. In rough conditions with uneven surface and considerable obstruction the labour might easily be trebled. For such soil as exists in the waste areas previously described, five dollars per acre would be a safe figure for labour in planting.

Cost of Management and Protection.—Cost of management and protection forms one of the large items to be charged against a forest crop.

It is quite possible for one man to patrol from 5,000 to 20,000 or even more acres of forest land, depending upon topography and other local conditions. The larger the area which can be patrolled by one man, the smaller the acreage cost. If one man has to spend his time protecting 500 acres of forest land it would make the acreage cost very high and would probably make the proposition a bad investment.

Owing to the problem of patrol it can be readily understood that the state or other corporation could not deal with small, detached areas. This question, of the difficulty of protecting small, detached areas, usually makes it inadvisable for private persons to undertake forestry as a separate investment, especially where the tract is a long distance from the owner's residence.

The annual cost of forest administration and protection in Germany varies from twenty-two cents to sixty-five cents per acre. Owing to a more scattered population and other factors our acreage cost will be much smaller. Some estimates have placed this at fifteen cents per acre which is probably conservative enough for the present consideration.

Taxation.—Provincial or "crown lands" in Ontario are exempt, at present, from taxation so that in government management of forest lands it is not entirely necessary to discuss this question. Waste lands, as described in previous pages, are situated in organized communities and certain existing roads will necessarily have to be maintained. These roads will act as splendid fire lines and part of their maintenance should be charged to protection.

For the present discussion a tax will be charged against the forest crop. I will use the township or municipal rate which is imposed for all purposes, including schools. In 1907 this rate was 17 mills on the dollar. The average rate for the last decade was about 16 mills. It may be claimed that this is a high tax rate to apply to forest land, but it will be on the safe side.

In Norfolk County the Charlotteville Township rate for 1907 was 10.9 mills on the dollar. South Walsingham Township rate was 16 mills on the dollar.

In Simcoe County the Tossorontio Township rate for 1907 was 9.9 mills on the dollar. For the Township of Essa the rate was 15.8 mills on the dollar.

In this connection it may be of interest to note the effect on the township revenue, of withdrawing waste lands from the assessment. One hundred acres at $5.00 per acre would give $500.00 of assessable value. With a rate of 17 mills on the dollar, which is a high average for the townships containing such lands, the one hundred acres would pay in taxes $8.50. One thousand acres would pay $85.00 and five thousand acres would pay $425.00 taxes.

Applying this to South Walsingham Township, in Norfolk County, let us estimate what this would mean. South Walsingham in 1907 had a rate of 16 mills and a total assessed value of $882,364. The total taxes imposed for all purposes was $14,078. By withdrawing five thousand acres of waste land at $5.00 an acre from the assessable value, the township would lose $25,000 of assessable property. This would leave assessable property worth $857,364 on which to raise the $14,078 necessary for township expenses. This figures out at a rate of about 17 mills on the dollar. In other words the withdrawing of five thousand acres of waste land would raise the township rate one mill. As a matter of fact much of this land is assessed lower than $5.00.

Estimates of Investment.—Taking one acre of white pine as a unit, it will be of interest to sum up what it will have cost at the end of forty and sixty years.

Cost of Land, $5.00, at 3½%, for 40 years	$19 80
Cost of Plants and Planting, $10.00, at 3½%, for 40 years	39 60
Management and Protection, 15c per year, at 3½%, for 40 years	10 95
Taxation (rate of 17 mills on the dollar would give an acreage charge of 8.5 cents on five dollar land), 9c per year, at 3½% for 40 years	6 57
Total	$76 92
Less original cost of land	5 00
Total expense	$71 92

In the above estimate it will be noted that cost of land has been placed at the conservative figure of $5.00 per acre. Much of the land referred to in previous pages will cost less.

From growth studies made in various parts of the white pine region, it is safe to predict that it will be possible to obtain at least forty cords of white pine per acre from forty year old plantations. Forty year old white pine would not be suitable for saw material. The trees would vary from 8 to 12 inches in diameter. Such material is being cut at present in New England, and is worth about $4.00 per cord on the stump. This material is used for box boards, etc., where small dimensions are acceptable.

Estimating forty cords per acre at $4.00 per cord would give $160.00. Deducting the total cost of $71.92 as given above there would be a net revenue of $88.08 after paying 3½ per cent. on all money invested.

Although it would be possible to cut forty year old white pine at a profit, it would pay to allow the trees to stand for a longer period. In sixty years the white pine will have reached saw material size and the following estimate is given:

Cost of Land, $5.00, at 3½%, for 60 years	$39 39
Cost of Plants and Planting, $10.00, at 3½%, for 60 years	78 78
Management and Protection, 15c per year, at 3½%, for 60 years	29 48
Taxation. (rate of 17 mills on the dollar would give an acreage charge of 8.5 cents on five dollar land), 9 c per year, at 3½%, for 60 years	17 69
Total	$165 34
Less original cost of land	5 00
Total expense	$160.34

From various growth studies made in the Lake States and elsewhere it is quite reasonable to say that an acre of 60 year old white pine, artificially planted will contain about two hundred trees varying from 12 inches to 24 inches in diameter. Assume that there will be two hundred trees of 18 inches diameter, which is a conservative estimate. This 18 inch tree will cut 400 feet B.M. and the acre would yield 80,000 feet. At a stumpage value of $10.00 per 1,000 the acre would be worth $800.00.

The above estimate does not take into account the thinnings which would come during the period. The $800.00 represents only saw material and there would, without doubt, be a market for the smaller dimensions.

Stumpage value for one acre of white pine 60 years old	$800 00
Total cost as shown above	160 34
Net Profit	$639 66

This $639.66 is the same as a yearly rental of $3.25 during the 60 years, being capitalized at 3½ per cent, in addition to the 3½ per cent compound interest on all money invested.

REFORESTATION IN OTHER COUNTRIES.

The policy of reclaiming, through forestry methods, lands unfit for agriculture, has been in vogue in older countries for a considerable time.

The following figures are taken from "Economics of Forestry," by B. E. Fernow:

In Prussia, during the decade of 1882-1891, some 200,000 acres, waste or poorly wooded, were purchased at an expense of $3,500,000. During the same decade the reforestation of 80,000 acres was affected.

In Prussia during the decade 1891-1900, 170,000 acres of waste lands were added to the state forest lands at the average cost of $10.00 per acre and the budget of 1900 contained $800,000 for that purpose. Bavaria spent about $6,000,000 in such purchases during the last fifty years.

In France, under the reforestation act of 1882, the state has spent in purchases of worn-out lands, in works to check torrents and in reforesting, nearly $20,000,000.

The following is taken from the "History of Forestry," by B. E. Fernow, page 203.

"Centrally located between the valleys of the Loire and Cher near Orleans, lies the region of La Sologne. About the middle of the 19th century 200,000 acres of non-agricultural lands were planted with Maritime and Scotch pine. The cost per acre amounted $5.00. An estimate of the value of

these plantations places it at $18,000,000, so that lands which 50 years ago could hardly be sold for $4.00 per acre, now bring over $3.00 as an annual revenue."

In the United States activity in reforesting is worthy of notice. Several states are buying back waste lands for forestry purposes.

The State of New York has for several years been buying back waste lands and replanting. In 1908, $30,000 was available for nursery work and replanting. In this work the low cost of $6.00 per acre for plants and planting is said to have been attained.

The State of Wisconsin has adopted a definite forest policy, and is segregating its non-agricultural lands at the headwaters of the Wisconsin River. During 1908, 33,880 acres of cut over forest lands were purchased at a low cost of $98,590.

The following is quoted from the "Forestry Quarterly," vol. VI., No. 3;

"As evidence that the artificial reproduction of forests is finding quite general application in coördination with the other lines of forest work, we have only to mention the operations of the Santa Clara Lumber Company and the St. Regis Paper Company, in New York State, as well as of the New York State Forest Commission, which may fairly be claimed to be the result and heritage of the demonstration of the defunct Cornell College of Forestry; the Diamond Match Company, in New England; the Delaware & Hudson, the Pennsylvania, and the Santa Fe Railroads, the Cleveland-Cliffs Iron Company, and several coal and coke companies in Central and Western Pennsylvania. The National Government is also giving increased attention to this work, while several states, notably New York, Pennsylvania, New Jersey, Michigan, Ohio, Massachusetts, and Connecticut are planting extensively on state lands or aiding such work on private holdings."

As a testimony of a private corporation's faith in reforesting, a good example may be cited in the operations of the Pennsylvania Railroad. This corporation employs trained foresters and has adopted a definite forest policy in regard to its waste lands.

In 1907, the total number of trees set out was 315,000. In 1908 about 448,000 seedlings were planted. The latter plantations were made at a cost of $12.00 per acre using purchased plants. By the use of plants from their own nurseries, which have been established, it is expected to lower the cost to about $8.00 per acre.

HARDWOOD SUPPLIES.

If these areas in Southern Ontario were again placed under forest, it would assist to insure this older part of the Province against a wood famine for its local industries. It probably will not be possible to hold under forest enough land in this region to supply the future hardwood demands. Forest growth must be gradually relegated to non-agricultural soils, and many of these are not suitable to support hardwood growth. There are, however, portions of these waste areas where it will be possible to grow oak, chestnut, ash, etc.

Our northern forests do not produce the hardwoods which to-day are required in the arts. Southern Ontario has been denuded of these valuable woods. It is practically impossible to buy in commercial quantities, in any district in Ontario, white ash, white oak, hickory, etc. An occasional specimen may be found, but our chief supply is to-day imported from the United States and the tropics.

American or soft elm is the chief hardwood now being cut in southern Ontario. Twenty-five years ago it could scarcely be sold for $8.00 per M feet on the stump. To-day it is worth from $22.00 to $30.00 per M feet in car lots.

For the year ending March 31st, 1908, Canada imported $9,953,164 worth of forest products. Some of the important items going to make up this figure are as follows: Oak, $2,173,793; southern pine, $2,170,143; cherry. chestnut, gumwood, hickory, whitewood, $684,252; fence posts and railroad ties, $599,544.

These sources will gradually be closed to us. United States will very soon cease to be a wood exporting country, and the future supply of hardwood for Ontario is indeed a serious problem.

Fig. 17. An abandoned farm in South Walsingham, Norfolk County.

SOCIAL CONDITIONS.

The policy of segregating and placing under forest management the large bodies of waste land in the southern part of the Province, is safe from a purely financial consideration. There are, however, other economic reasons for adopting this policy.

The story of agricultural settlement in these regions, with its struggles to wrest a living from the soil, and the final abandonment of farms, would call forth facts which alone would prove a strong argument in favour of removing people from such conditions.

During the early settlement on these lands, it was possible for the settler to obtain part of his living through the lumberman's operations. It was the custom to work in the lumber camp in the winter and make an attempt

of farming in the summer. When the lumber industry ceased, it was impossible for him to obtain a reasonable living from the soil. In most cases soil conditions did not warrant agricultural settlement, and the settler frequently went into the district merely to get the lumber.

Many estimable and worthy families have mistakingly settled in these non-agricultural districts. The tendency, upon realizing the hopelessness of farming under such conditions, is to sell out or abandon the farm. Too frequently, however, it is impossible for them to sell the land and find means with which to better their conditions. This last state of affairs presents a sad problem. The most serious situation, however, is that in which the settler makes no struggle to improve his surroundings, but simply drifts, and gradually degenerates along with the land. It is not advisable to describe in these pages, conditions such as actually exist in some parts of Ontario. A knowledge of the social conditions in these non-agricultural areas would of itself be a convincing argument that such lands should be managed only

Fig. 18. An abandoned farm in Charlottoville Township, Norfolk County. Notice the remnants of the wagon gradually being covered with sand.

for forest growth. These districts under attempted agricultural management cannot properly support social organizations, such as schools and churches. The state cannot afford to allow citizens to live and develop under the enforced conditions existing in many of these waste areas.

Rye and buckwheat are two crops common to sand lands, it being possible to grow them where other field crops could not thrive. Figures were collected in the sand lands of Norfolk County in connection with growing rye, and these show one reason why such lands are abandoned. The following is a financial estimate of a rye crop, using *one acre* as a unit. Team and man are figured at the low cost of $2.50 per day:

Fall rye produces on this land, an average of 10 bush. to the acre. which at 75c would be		$7 50
Plowing (man and team plows about 2 acres per day)	$1 25	
Harrow and roll (man and team, about 2 acres per day)	20	
Seeding (man and seed about 10 acres per day)	20	
Seed (1½ bush. per acre at 75c)	1 12	
Cutting	75	
Threshing (2c per bush., 10 bush.)	20	— $3 72
Balance		$3 78

It is quite evident that with this small revenue, which does not take into account all possible charges, there would be a very poor living from farming such land.

CONCLUSION.

There is, at present, in the old settled portion of Ontario an aggregate of about 8,500 square miles of farmers' woodlands. It is safe to say that there is, in addition to the assessed woodland, another area of 8,500 square miles which is suited only for forest growth. This means that southern Ontario could eventually have over ten million acres of private woodlands.

It is very important that the private landowner be urged and educated to feel the necessity of protecting existing woodlands, and replanting waste areas. This branch of work can be greatly assisted by demonstrating forestry methods on these larger areas. The influence which this policy must eventually exert is shown by looking at the map in figure 1 and noticing the representative way in which these proposed forest reserves are situated throughout Southern Ontario.

Government forest nurseries situated at certain of these points will be able to supply planting material to owners anxious to replant waste land.

In addition to their value as object lessons in forestry methods, these areas should be preserved for the people of Ontario as recreation grounds for all time to come. The need of such areas is demonstrated in the fact that Rondeau Park on Lake Erie has every year thousands of local visitors.

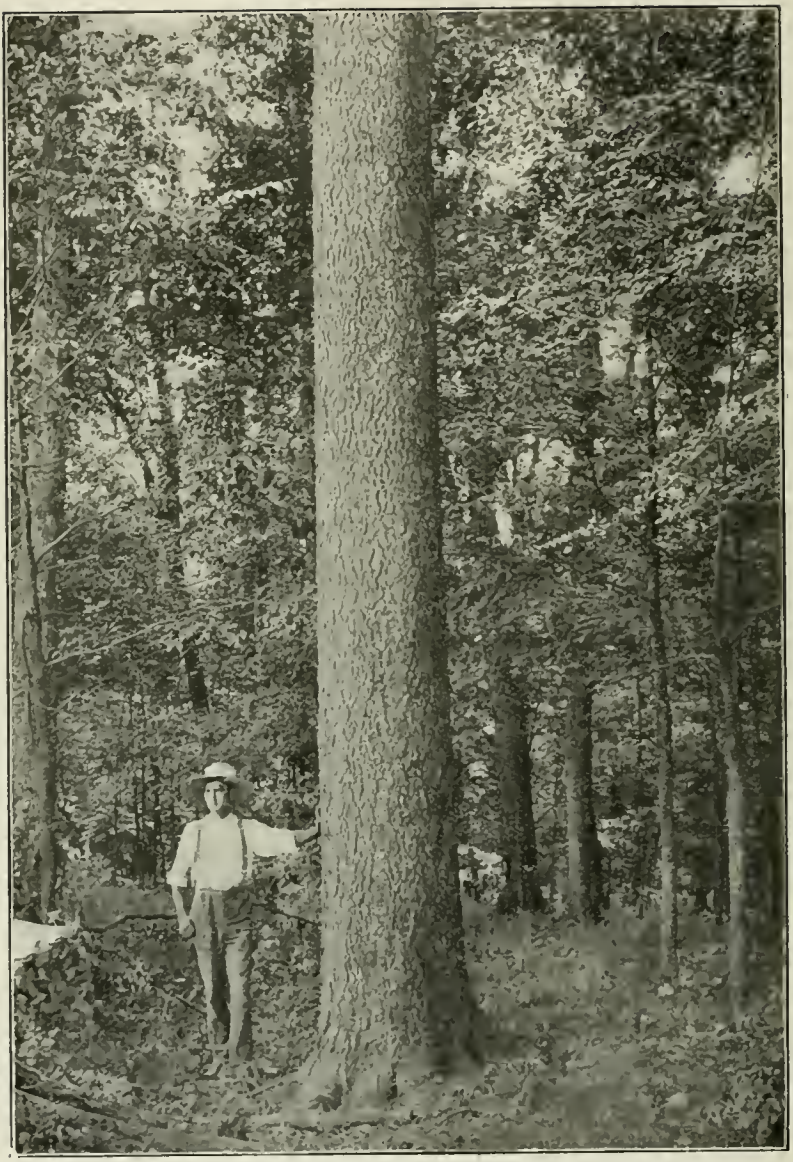
The policy of putting these lands under forest management has many arguments in its favour. It will pay as a financial investment; assist in insuring a wood supply; protect the headwaters of streams; provide breeding ground for wild game, provide object lessons in forestry, and prevent citizens from developing under conditions which can end only in failure.

Respectfully submitted,

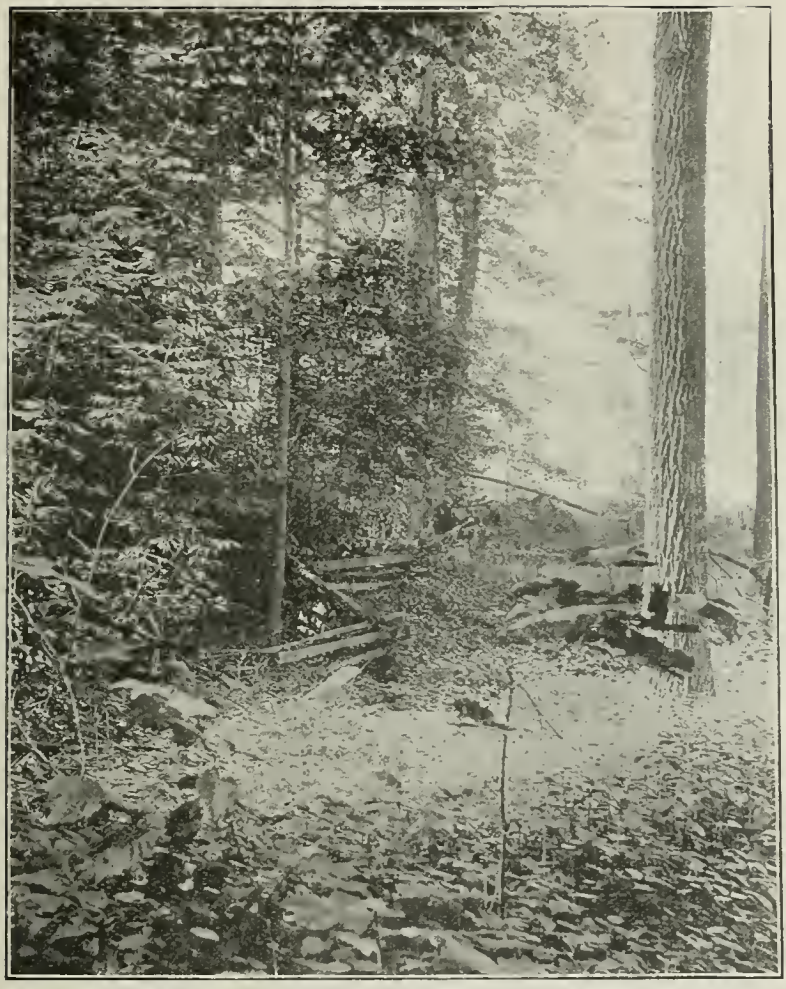
E. J. ZAVITZ,

Professor of Forestry.

Ontario Agricultural College,
Guelph, March, 1909.



Woodlot at Agricultural College.



Woodlot protected from stock.

Drifting sand land in Norfolk County to be reforested.

REPORT

OF THE

WOMEN'S INSTITUTES

OF THE

Province of Ontario

1908

PART I.

(PUBLISHED BY THE ONTARIO DEPARTMENT OF AGRICULTURE, TORONTO.)

PRINTED BY ORDER OF
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1908

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TORONTO.

To the Honourable JOHN MORISON GIBSON, K.C., LL.D., etc., etc., etc.

Lieutenant-Governor of the Province of Ontario.

May it Please Your Honour:

I have the pleasure to present herewith for the consideration of your Honour the Report of the Women's Institutes of Ontario for 1908.

Respectfully submitted,

JAMES S. DUFF,

Minister of Agriculture.

Toronto, 1908.

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Women's Institutes of Ontario, 1908.

ANNOUNCEMENT OF SUPERINTENDENT.

Not only in the number of societies, attendance and membership has there been a marked advance in Women's Institute work in Ontario during the past year, but also in the enthusiasm shown by the officers and members, and the optimistic view which prevails as to the possibilities for future work. When a band of over 12,000 women meet together in their respective localities from month to month with a view to discussing any and all topics which make for the betterment of conditions in the home and the advancement of community life, we are justified in looking to the Women's Institutes to exert a very strong influence for good in the rural districts of Ontario. Organization has been affected in 89 electoral districts, with branches at 465 points. The total attendance at meetings during 1907-08 was 93,951.

The records of attendance, membership, etc., will be found in the statistical statement immediately following this announcement. The list of meetings held during the summer months, together with speakers and their subjects, was issued in Part II. of the Women's Institute report for 1908, and, therefore, does not appear in this volume as heretofore. The number of meetings held during the summer series was 510, and were attended with more than usual interest and enthusiasm. The work during the past year has extended to many new localities, while many of the older organizations have been imbued with new life. We regret to receive reports occasionally of an organization disbanding: but, taking it all in all, the proportion of Institutes which continue to prosper and grow is far beyond the expectation of even the most sanguine connected with the work at its inception.

It is particularly gratifying to know that in the far northern sections of the Province, the work is most highly appreciated and is, we believe, doing a service to the people of those isolated localities which cannot be or has not been accomplished through any other channel.

The mothers and daughters of the homes are coming to appreciate more and more their importance as citizens, and are accepting with a deeper sense of its importance, both to the individual and the state, the responsibility which rests upon them as leaders. One feature full of hope for the future is the increasingly large number of young girls who are not only joining the Institute, but who assist in many ways in carrying on the work successfully. It is the pleasing duty to express our appreciation of the services rendered by the noble band of officers who are assisting the Department so efficiently in carrying on this work. Many of these women are sacrificing time and energy in a cause which they believe will bring honor to themselves and stability to the rising generations. We believe that those who are now connected with Institute work will, in years to come, be proud to refer to the days when they spent much energy and time to induce other home makers to join with them in carrying on the work of the Institutes.

Then again we believe that much of the success of the work is a direct result of the earnest and efficient work done by the lecturers sent out by the Department to attend meetings in different localities from time to time. These lecturers appreciate more than the average person can the possibilities

for doing real service to the Institutes by directing them as to methods of planning for and conducting their meetings from month to month and referring them to the best literature, both standard works and periodicals, to be utilized in connection with their regular meetings, and in study on the part of the individual members.

A promising feature of Institute work, and one which is much appreciated by the few counties which have undertaken it, is the holding of county or district conventions. This gives an opportunity for the members and officers of a limited territory to come together to discuss in detail the work as it is carried on, and to lay plans for extending and perfecting the same. While much good is derived from the annual convention held at Guelph each year, and much enthusiasm is created thereby, we believe that the county convention has just as important a place in the successful carrying on of the work. We would strongly urge that the Institutes of a riding arrange for a meeting at some central point some time in the early fall. The Department will be prepared to send a special speaker at little cost to the Institutes. Local talent should be utilized, and some time should be devoted to reports from the different branches as to successful lines of work, and to statements of difficulties met with and ways of overcoming them. At least two sessions should be held, morning and afternoon or afternoon and evening. A close acquaintance on the part of the officers of the different branches with what is being done throughout the county is an inspiration to more aggressive work. The social intercourse of the county convention is one of the most helpful and highly prized features.

The most telling and important work is that arranged for and carried out by the local officers in their respective neighborhoods. It is by the exercise of talent that greater power is gained, and an Institute cannot hope to prosper unless each member gives the organization the benefit of her best service. The officers must keep ever alert to utilize the best talent in the locality, and so plan the programmes, question drawers, discovery meetings, etc., that each may take a part.

GEO. A. PUTNAM,
Superintendent.

WOMEN'S INSTITUTES OF ONTARIO.

DISTRICT OFFICERS FOR 1908-9.

District.		Name.	P. O. Address.
Amherst Island	President	Mrs. R. D. McDonald	Emerald.
	Vice-President	Mrs. Henry Filson	Stella.
	Secretary-Treasurer	Mrs. S. K. Tugwell	Stella.
Brant, North	President	Mrs. Walter Patten	St. George.
	Vice-President	Mrs. Harry Freeman	St. George.
	Secretary-Treasurer	Miss Edith I. Burt	St. George.
Brant, South	Hon. President	Mrs. Lester	Burford.
	President	Mrs. A. D. Muir	Burford.
	Vice-President	Mrs. G. H. Fowler	Burford.
	Secretary-Treasurer	Miss E. A. Lester	Burford.
Bruce, Centre	President	Mrs. Donald McIntyre	Paisley.
	Vice-President	Mrs. S. T. Jackson	Ripley.
	Secretary-Treasurer	Miss Anna McCaskill	Kincardine.
Bruce, North	President	Mrs. W. B. Moore	Lion's Head.
	Vice-President	Mrs. Wm. Warder	Spry.
	Secretary-Treasurer	Mrs. D. Thomson	Lion's Head.
Bruce, South	President	Miss Bessie Rowand	Walkerton.
	Vice-President	Mrs. Pletsch	Mildmay.
	Secretary-Treasurer	Miss Ethel McConnell	Walkerton.
Bruce, West	President	Mrs. D. D. Wark	Tara.
	Vice-President	Mrs. A. Aiken	Allenford.
	Secretary-Treasurer	Mrs. James S. Cameron	Port Elgin.
Carleton	President	Mrs. R. A. Craig	North Gower.
	Secretary-Treasurer	Mrs. A. W. Callander	North Gower.
Dufferin	President	Mrs. J. J. Hall	Shelburne.
	Vice-President	Mrs. N. Fisher	Shelburne.
	Secretary-Treasurer	Miss Jennie Hall	Shelburne.
Dundas	President	Mrs. C. W. Casselman	Chesterville.
	Vice-President	Mrs. Catherine Strader	Iroquois.
	Secretary-Treasurer	Mrs. W. A. Brown	Chesterville.
Durham, East	President	Mrs. H. Hassard	Millbrook.
	Vice-President	Mrs. John Greer	Bailieboro.
	Secretary-Treasurer	Mrs. J. R. Eakins	Millbrook.
Durham, West	President	Mrs. C. N. Ruse	Hampton.
	Vice-President	Mrs. S. Shortridge	Solina.
	Secretary-Treasurer	Miss E. E. Haycraft	Bowmanville.
Elgin, East	President	Dr. Annie Backus	Aylmer.
	Vice-President	Mrs. D. D. Finch	Kingsmill.
	Secretary-Treasurer	Mrs. M. E. Lyons	Aylmer.
Elgin, West	President	Mrs. E. V. Docker	Wallacetown.
	Vice-President	Mrs. J. D. Graham	Dutton.
	Secretary-Treasurer	Miss M. C. Gow	Wallacetown.
Essex, North	President	Mrs. Ed. Plant	South Woodslee.
	Vice-President	Mrs. Jno. Holden	Oldcastle.
	Secretary-Treasurer	Miss Ada B. Wilson	Essex.
Essex, South	President	Mrs. J. F. McCreery	Essex.
	Vice-President	Mrs. Hubert Wigle	Kingsville.
	Secretary-Treasurer	Mrs. E. E. Adams	Leamington.
Grenville, South	President	Mrs. J. Pinel	Maynard.
	Vice-President	Mrs. Hermon Troop	Maynard.
	Secretary-Treasurer	Miss E. Ball	Maynard.
Grey, Centre	President	Mrs. J. I. Graham	Vandeleur.
	Vice-President	Mrs. Robt. Best	Flesherton.
	Secretary-Treasurer	Mrs. A. E. Myles	Kimberley.

DISTRICT OFFICERS FOR 1908-9.—*Continued.*

District.		Name.	P. O. Address.
Grey, North	Hon. President	Mrs. Jas. Gardner	Kemble.
	President	Mrs. Jos. Davidson	Lake Charles.
	Vice-President	Mrs. R. Riddell	Desboro.
	Secretary-Treasurer	Mrs. B. J. Long	Meaford.
Grey, South	President	Mrs. R. Pettigrew	Varney.
	Vice-President	Mrs. J. Schriel	Ayton.
	Secretary-Treasurer	Mrs. Thos. McGirr	Durham.
Haldimand	President	Mrs. R. E. King	DeCewsville.
	Vice-President	Mrs. Dr. Burns	Caledonia.
	Secretary-Treasurer	Mrs. W. M. Thompson	Canfield.
Halton	President	Mrs. J. Cameron	Acton West.
	Vice-President	Mrs. Dr. Gray	Acton West.
	Secretary-Treasurer	Mrs. Geo. Havill	Acton West.
Hastings, East	President	Mrs. A. Loucks	Foxboro.
	Vice-President	Mrs. J. D. Collup	Belleville.
	Secretary-Treasurer	Mrs. Currie English	Melrose.
Hastings, North	President	Mrs. R. S. Allen	Queensboro.
	Vice-President	Mrs. Robert Totton	Wellman's Corners.
	Secretary-Treasurer	Mrs. Jas. McComb	Bellview.
Hastings, West	President	Mrs. J. Phillips	Wallbridge.
	Vice-President	Mrs. S. W. Lloyd	Wallbridge.
	Secretary-Treasurer	Mrs. S. E. Lane	Wallbridge.
Huron, East	President	Mrs. Wm. Goggins	Fordwich.
	Vice-President	Mrs. Sig. Cole	Ethel.
	Secretary-Treasurer	Mrs. Jas. Armstrong	Gorrie.
Huron, South	President	Mrs. D. Cobbledick	Exeter.
	Vice-President	Mrs. J. Spackman	Bayfield.
	Secretary-Treasurer	Mrs. A. Hastings	Exeter.
Huron, West	President	Mrs. Will Jenkins	Holmesville.
	Vice-President	Mrs. M. Swanson	Goderich.
	Secretary-Treasurer	Mrs. F. W. Watts	Clinton.
Kent, East	President	Mrs. Wm. Smale	Highgate.
	Vice-President	Miss Annie Swanton	Highgate.
	Secretary-Treasurer	Mrs. T. H. Tape	Highgate.
Kent, West	President	Mrs. G. H. Dawson	Port Alma.
	Vice-President	Mrs. E. LaMarche	Wheatley.
	Secretary-Treasurer	Miss Pearl Mills	Wheatley.
Lambton, East	President	Miss F. B. Rawlings	Forest.
	Vice-President	Mrs. J. W. Hunter	Wyoming.
	Secretary-Treasurer	Miss S. Pettypiece	Forest.
Lambton, West	President	Mrs. R. Young	Waubuno.
	Vice-President	Mrs. Wm. Tucker	Brigden.
	Secretary-Treasurer	Miss A. Young	Waubuno.
Lanark, North	President	Mrs. W. C. Caldwell	Lanark.
	Vice-President	Mrs. G. H. Echlin	Lanark.
	Secretary-Treasurer	Mrs. D. C. MacIntosh	Lanark.
Lanark, South	President	Mrs. David Hogg	Perth.
	Vice-President	Mrs. W. H. Butler	Harper.
	Secretary-Treasurer	Mrs. James V. Watson	Perth.
Lennox	President	Mrs. C. F. Allison	Adolphustown.
	Vice-President	Mrs. Duffett	Adolphustown.
	Secretary-Treasurer	Miss Lilien Carr	Dorland.
Lincoln	President	Mrs. W. S. Duncan	Jordan Harbor.
	Vice-President	Mrs. Walter Tufford	Beamsville.
	Secretary-Treasurer	Mrs. E. W. Fry	St. Catharines.
Middlesex, North	President	Mrs. J. H. McKay	Ailsa Craig.
	Vice-President	Mrs. P. L. Graham	Lobo.
	Secretary-Treasurer	Miss B. A. Numa	Coldstream.

DISTRICT OFFICERS FOR 1908-9.—*Continued.*

District.		Name.	P. O. Address.
Middlesex, West	President	Mrs. Jas. Bogue	Strathroy.
	Vice-President	Mrs. W. B. Lindsay	Strathroy.
	Secretary-Treasurer	Mrs. M. W. Cummiford	Strathroy.
Monck	President	Mrs. S. Woodland	Smithville.
	Vice-President	Mrs. J. C. Flewelling	Wellandport.
	Secretary-Treasurer	Mrs. Angus Campbell	Marshville.
Muskoka, Centre	President	Miss C. McKnee	Falkenburgh.
	Vice-President	Mrs. W. McKnight	Parkersville.
	Secretary-Treasurer	Mrs. John Newson	Parkersville.
Muskoka, North	President	Mrs. Geo. Swan	Stanleydale.
	Vice-President	Mrs. Mary Hall	Ashworth.
	Secretary-Treasurer	Mrs. Wm. DeMaine	Ashworth.
Muskoka, South	President	Mrs. Chas. Faires	Muskoka Falls.
	Vice-President	Mrs. Chas. Evans	Muskoka Falls.
	Secretary-Treasurer	Mrs. H. Corrigan	Bracebridge.
Norfolk, North	President	Mrs. Frank Jarvis	Simcoe.
	Secretary-Treasurer	Mrs. Safford Kitchen	Bloomsburg.
Northumberland, E.	President	Mrs. W. Farley	Smithfield.
	Vice-President	Mrs. B. Welton	Castleton.
	Secretary-Treasurer	Mrs. H. J. Scripture	Brighton.
Northumberland, W.	President	Mrs. Frank Nichol	Roseneath.
	Vice-President	Mrs. I. Wilson	Cobourg.
	Secretary-Treasurer	Mrs. J. J. Hinman	Cobourg.
Ontario, North	President	Mrs. Thos. Feasby	Uxbridge.
	Vice-President	Mrs. Geo. Feasby	Uxbridge.
	Secretary-Treasurer	Mrs. Wm. H. Thompson	Uxbridge.
Ontario, South	President	Mrs. R. R. Mowbray	Kinsale.
	Vice-President	Mrs. John Nesbitt, Sr	Oshawa.
	Secretary-Treasurer	Mrs. Wm. Balmer	Whitby.
Oxford, North	President	Mrs. G. A. Hogg	Thamesford.
	Vice-President	Mrs. G. Birley	Drumbo.
	Secretary-Treasurer	Miss M. King	Hickson.
Oxford, South	President	Mrs. Jas. Wood	Springford.
	Vice-President	Mrs A. E. Cornwall	Norwich.
	Secretary-Treasurer	Mrs. J. C. Smart	Springford.
Peel	President	Mrs. A. C. Wilson	Alton.
	Vice-President	Miss M. Shields	Mono Road.
	Secretary-Treasurer	Miss Susie Campbell	Brampton.
Perth, North	President	Mrs. Dr. Parker	Milverton.
	Vice-President	Mrs. H. M. Scheafer	Milverton.
	Secretary-Treasurer	Mrs. A. Alexander	Milverton.
Perth, South	President	Mrs. V. Stock	Tavistock.
	Vice-President	Mrs. Parker	Sebringville.
	Secretary-Treasurer	Miss M. Pringle	Staffa.
Peterborough, E	President	Mrs. David Miller	Warsaw.
	Vice-President	Mrs. Currie	Warsaw.
	Secretary	Miss Mae Davis	Warsaw.
	Treasurer	Miss Morgan	Warsaw.
Peterborough, W.	President	Mrs. A. Higgins	Lakefield.
	Vice-President	Mrs. J. Reed	Lakefield.
	Secretary-Treasurer	Mrs. W. H. Stabler	Lakefield.
Prince Edward	President	Mrs. H. J. Cooper	Bloomfield.
	Vice-President	Mrs. U. P. Niles	Wellington.
	Secretary-Treasurer	Mrs. C. S. McGillivray	Picton.
Renfrew, North	President	Miss Hattie Carswell	Westmeath.
	Vice-President	Mrs. Nathan Purdy	Douglas.
	Secretary-Treasurer	Mrs. John A. Bennie	Beachburg.
Russell	President	Mrs. W. Summerby	Russell.
	Vice-President	Mrs. A. Carscadden	Russell.
	Secretary-Treasurer	Mrs. W. J. W. Lowrie	Russell.

DISTRICT OFFICERS FOR 1908-9.—*Continued.*

District.		Name.	P. O. Address.
Simcoe, Centre	President	Mrs. R. Briggs	New Flos.
	Vice-President	Miss M. A Loftus	Apto.
	Secretary-Treasurer	Mrs. W. H. Sparling	Elmvale.
Simcoe, East	President	Mrs. Wm. Bacon	Orillia.
	Secretary-Treasurer	Miss Dora Harvie	Orillia.
Simcoe, South	President	Mrs. T. B. Bateman	Fennels.
	Vice-President	Mrs. John Todd	Lefroy.
	Secretary-Treasurer	Mrs. R. Boyes	Churchill.
Simcoe, West	President	Mrs. A. B Rose	Sunnidale Corners.
	Vice-President	Mrs. F. Webster	Creemore.
	Secretary-Treasurer	Miss Amelia Ovens	Duntroon.
Union	President	Mrs. Mary Miller	Clifford.
	Vice-President	Miss Mary Watson	Clifford.
	Secretary-Treasurer	Mrs. J. R. Scott	Clifford.
Victoria, East	President	Mrs. Wm. Fell	Bury's Green.
	Vice-President	Mrs. John Hodgson	Burnt River.
	Secretary-Treasurer	Miss Emily L. Nie	Fenelon Falls.
Victoria, West	President	Mrs. F. Webster	Cambray.
	Vice-President	Mrs. E. G. Lytle	Oakwood.
	Secretary-Treasurer	Mrs. J. T. Birchard	Linden Valley.
Waterloo, North	President	Mrs. And. Brown, Sr	Winterbourne.
	Vice-President	Mrs. Geo. F. Lackner	Hawkesville.
	Secretary-Treasurer	Miss Lucinda Bellinger	Wellesley.
Waterloo, South	President	Mrs. Thos. Shaw	Hespeler.
	Vice-President	Mrs. G. Tilt	Blair.
	Secretary-Treasurer	Mrs. Will Elliott	Galt.
Welland	President	Mrs. Milton Pound	Ridgeway.
	Vice-President	Mrs. John Kottmuir	Welland.
	Secretary-Treasurer	Miss Maude R. Baker	Ridgeway.
Wellington, Centre	President	Miss Ada Currie	Ospringe.
	Vice-President	Mrs. W. Edwards	Belwood.
	Secretary-Treasurer	Mrs. Jas. McLachlan	Erin.
Wellington, East	President	Mrs. H. Quinlan	Damascus.
	Vice-President	Mrs. Wilkins	Arthur.
	Secretary-Treasurer	Mrs. Frank Yoe, Jr	Mt. Forest.
Wellington, South	President	Mrs. H. Hammersley	Aberfoyle.
	Vice-President	Mrs. John Kirby	Marden.
	Secretary-Treasurer	Miss Alice Whitelaw, Box 328	Guelph.
Wellington, West	President	Mrs. Frank Short	Moorefield.
	Vice-President	Mrs. S. M. Clemens	Drayton.
	Secretary-Treasurer	Miss Gertie McKay	Moorefield.
Wentworth, North	President	Mrs. Ed. Cornell	Rockton.
	Vice-President	Mrs. Ryckman	Waterdown.
	Secretary-Treasurer	Mrs. J. E. McDonough	Westover.
Wentworth, South	President	Mrs. Daniel Reed	Glanford.
	Vice-President	Mrs. R. S. Stevenson	Ancaster.
	Secretary-Treasurer	Clara M. Walker	Stoney Creek.
York, East	President	Mrs. A. S. Clarry	Locust Hill.
	Vice-President	Mrs. Dr. Young	Markham.
	Secretary-Treasurer	Miss Lulu Reynolds	754 Gerrard St. E. Toronto.
York, North	President	Mrs. C. F. Doane	Newmarket.
	Vice-President	Mrs. Geo. Ianson	Mt. Albert.
	Secretary-Treasurer	Mrs. C. E. Lundy	Newmarket.
York, West	President	Mrs. F. Rankin	Weston.
	Vice-President	Mrs. W. J. Farrand	Woodbridge.
	Secretary-Treasurer	Miss Libby Duncan	Emery.

Districts organized without separate district officers:—Haliburton, Middlesex E., Peterboro' N., Victoria N.

NORTHERN INSTITUTES.

District.		Name.	P. O. Address.
Algoma, Centre	President	Mrs. F. McKaughan	Goulais Bay.
Goulais Bay	Vice-President	Mrs. Malcolm McLean	Goulais Bay.
	Secretary-Treasurer	Mrs. G. Robertson	Goulais River.
Tarentorus	President	Mrs. T. C. Dinsmore	Tarentorus.
	Vice-President	Mrs. W. C. Nixon..Box 976	Sault Ste. Marie.
	Secretary-Treasurer	Mrs. Zelia Huckson..Box 182	Sault Ste. Marie.
Algoma, North Shore	President	Mrs. J. Armstrong	McLennan.
	Vice-President	Mrs. W. A. Shier	McLennan.
	Secretary-Treasurer	Mrs. H. A. Robinson	McLennan.
Manitoulin, East	President	Mrs. D. McDonald	Sandfield.
	Vice-President	Miss Sarah Hare	Sandfield.
	Secretary-Treasurer	Mrs. T. Smeltzer	Tehkummah.
Manitoulin, West	President	Mrs. G. Moscrop	Poplar.
	Vice-President	Miss Sarah Side	Poplar.
	Secretary-Treasurer	Miss Ida M. Noland	Poplar.
Rainy River	President	Mrs. Alec Corless	Emo.
	Vice-President	Mrs. Keating	Fort Frances.
	Secretary-Treasurer	Miss Jessie A. Stuart	Emo.
St. Joseph Island	President	Mrs. E. B. Kent	Harmony.
	Vice-President	Mrs. G. S. Lay	Richard's Landing.
	Secretary-Treasurer	Miss Lottie Ferguson	Richard's Landing.
Temiscamingue	President	Mrs. C. C. Farr	Haileybury.
	Vice-President	Mrs. Welbourne	Uno Park.
	Secretary-Treasurer	Mrs. W. Kirstine	Haileybury.
Thunder Bay	President	Mrs. John McMahon	Murillo.
	Vice-President	Mrs. J. C. Hymers	Hymers.
	Secretary-Treasurer	Mrs. Dr. Garver	Slate River.
Wabigoon	President	Mrs. Sylvester Hall	Oxdrift.
	Vice-President	Mrs. A. L. Orvis	Dryden.
	Secretary-Treasurer	Mrs. Dan Hutchison	Dryden.

Districts without separate district officers :—Algoma East, and Parry Sound East.

Institute District.	Membership.	No. of meetings held.	Total attendance.	No. of papers read or addresses delivered.	Receipts.					Expenditure.								
					Cash on hand per last Report.	Members' fees.	Grants.	Miscellaneous.	Total receipts.	Expense for meetings.	Officers' salaries and expenses.	Postage and stationery.	Printing and advertising.	Lecturers' wages and expenses.	Periodicals for members.	Miscellaneous.	Total expenditure.	Balance on hand.
					$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Amherst Island	52	9	298	16	6 52	6 25	20 00	1 50	34 27	75	12 50	2 16	.....	4 25	11 56	40	31 62	2 65
Brant, N	160	52	1,447	102	26 20	45 50	56 00	5 05	132 75	11 50	20 55	6 70	9 50	2 95	3 60	24 02	78 82	53 93
Brant, S	148	26	726	48	75 74	41 25	59 00	.....	175 99	16 20	25 00	15 77	6 50	14 70	.....	18 12	96 29	79 70
Bruce, C	87	32	882	80	45 39	20 75	65 72	4 84	136 70	14 82	31 30	6 09	5 50	5 00	4 95	6 10	73 76	62 94
Bruce, N	50	18	307	28	10 13	9 50	60 00	2 90	82 53	.....	10 00	2 45	50	.....	8 70	14 02	35 67	46 86
Bruce, S	96	19	677	25	60 88	27 00	35 00	1 68	124 56	1 50	10 00	5 46	3 00	10 50	21 75	10 72	62 93	61 63
Bruce, W	136	39	1,471	48	22 56	30 00	63 00	73	116 29	10 35	15 00	5 30	8 90	10 94	10 65	18 75	79 89	36 40
Carleton	31	8	525	16	.....	9 00	.....	.....	9 00	1 00	.....	50	.....	.....	.....	.....	1 50	7 50
Dufferin	230	80	2,441	98	64 97	49 50	90 00	32 88	237 35	10 95	45 75	11 81	17 80	28 10	10 20	41 04	165 65	71 70
Dundas	112	28	1,021	44	11 30	29 95	30 00	9 01	80 26	15 68	20 00	6 72	9 25	3 10	7 19	2 83	64 77	15 49
Durham, E	257	44	996	51	69 85	59 25	73 00	10 82	212 92	3 45	.....	6 05	2 80	13 75	.....	107 21	133 29	79 63
Durham, W	146	40	778	45	29 16	32 75	65 00	9 81	136 72	1 50	20 00	4 37	4 50	.....	32 80	34 40	97 57	39 15
Elgin, E	148	60	1,324	57	44 62	39 75	70 90	42 10	197 37	28 40	7 00	5 90	29 40	75 15	.....	28 13	173 98	23 39
Elgin, W	77	24	690	31	37 66	15 50	47 00	4 92	105 08	6 50	10 00	3 75	6 50	15 50	.....	17 00	59 25	45 83
Essex, N	189	46	1,601	73	55 97	41 25	44 35	13 87	155 44	2 65	25 60	6 36	9 00	11 15	6 60	29 90	91 26	64 18
Essex, S	46	10	424	27	.....	16 00	.....	.....	16 00	1 00	.....	45	.....	.....	.....	.....	1 45	14 55
Grey, C	228	92	2,130	150	116 07	54 75	87 00	51 55	309 37	17 72	29 00	12 81	11 25	45 20	32 40	67 82	216 20	93 17
Grey, N	213	70	1,665	133	78 12	45 00	62 00	24 65	209 77	26 10	20 00	14 97	11 30	18 35	12 78	18 90	122 40	87 37
Grey, S	124	40	1,373	88	19 44	25 50	50 00	1 28	96 22	10 93	13 20	3 91	4 40	16 75	2 00	11 55	62 74	33 48
Haldimand	383	141	3,593	283	105 02	95 25	133 00	54	333 81	15 25	66 80	13 53	17 06	22 20	25 35	26 57	186 76	147 05
Haliburton	54	32	340	39	.....	12 75	6 00	.....	18 75	3 00	.....	1 50	1 25	.....	.....	.....	5 75	13 00
Halton	395	129	3,710	191	111 08	83 50	113 00	297 47	605 05	45 40	35 00	12 40	13 20	10 55	22 01	359 38	497 94	107 11
Hastings, E	155	41	1,310	79	45 33	41 50	54 00	48 79	189 62	14 00	29 00	4 62	8 55	13 43	.....	32 75	102 35	87 27
Hastings, N	159	62	736	80	67 53	23 25	47 00	40 83	178 61	14 60	15 00	5 85	3 50	4 25	9 50	32 37	85 07	93 54
Hastings, W	59	17	548	46	.....	8 00	20 00	1 00	29 00	1 00	10 00	1 22	1 00	8 00	1 00	6 75	28 97	03

Huron, E.	86	36	701	37	4	48	23	25	44	00	30	43	102	16	20	24	25	00	3	54	6	00	10	00	14	34	6	69	85	81	16	35
Huron, S	61	21	289	20	16	50	16	25	52	00	27	11	111	86	17	00	15	00	4	72	7	20	6	00	9	00	23	17	82	09	29	77
Huron, W.	221	43	1,131	49	25	60	32	00	44	00	6	55	108	15	8	50	20	75	10	33	1	50	6	45	2	00	24	49	74	02	34	13
Kent, E.	64	15	258	10	21	50	10	25	32	00	7	56	71	31	2	25	10	00	2	29	2	25	9	75	.....		6	25	32	79	38	52
Kent, W.	112	35	645	48	51	46	24	95	63	90	21	97	162	28	4	00	20	64	4	33	6	50	21	70	3	50	19	80	80	47	81	81
Lambton, E.	92	29	632	43	17	24	18	00	28	00	7	07	70	31	8	60	5	00	2	36	6	60	2	00	4	30	13	07	41	93	28	38
Lambton, W.	75	23	460	19	22	72	20	00	34	00	.....		76	72	3	00	.....		3	23	6	25	1	60	.....		10	20	24	28	52	44
Lanark, S.	49	4	311	13	.....		.....		.....		.....		.....		.....		.....		.....		.....		.....		.....		.....		.....		.....	
Lennox	38	10	305	15	21	36	12	75	10	00	17	20	61	31		28	10	00	1	74	2	25	.....		20	40	19	14	53	81	7	50
Lincoln	130	26	778	36	31	02	39	75	48	00	105	13	223	90	7	00	17	45	4	70	4	50	19	80	.....		103	29	156	74	67	16
Middlesex, E.	14	2	54	4	.....		.....		.....		.....		.....		.....		.....		.....		.....		.....		.....		.....		.....		.....	
Middlesex, N.	288	106	4,164	126	141	24	68	50	116	50	9	65	335	89	22	15	28	00	11	18	7	45	7	50	19	95	36	26	132	49	203	40
Middlesex, W.	186	33	1,189	42	23	87	32	00	43	00	.....		98	87	8	70	10	00	3	78	4	00	6	00	23	62	12	10	68	20	30	67
Monck	107	44	685	76	20	18	24	25	48	00	44	87	137	30	5	00	15	00	7	90	4	00	21	89	3	15	66	32	123	26	14	04
Muskoka, C.	40	20	295	16	16	95	10	50	28	00	.....		55	45	.....		.....		1	75	3	50	11	25	.....		5	16	21	66	33	79
Muskoka, N.	49	31	419	19	.....		8	75	28	00	36	30	73	05	5	25	10	00	3	00	1	25	.....		.....		34	24	53	74	19	31
Muskoka, S.	108	56	694	56	104	26	21	50	51	00	45	50	222	26	14	00	16	00	8	11	1	50	15	25	4	70	39	21	98	77	123	49
Norfolk, N.	91	34	773	50	44	39	18	65	42	00	1	86	106	85	5	40	15	00	3	61	2	75	8	25	.....		1	25	36	26	70	59
Northumberland, E.	200	33	1,313	58	43	94	44	25	64	00	22	39	174	58		36	33	60	3	82	13	40	12	78	37	03	37	00	137	99	36	59
Northumberland, W.	155	53	1,049	70	64	38	29	00	71	00	83	39	247	77	5	04	34	00	5	63	5	45	31	90	10	60	32	45	125	07	122	70
Ontario, N.	23	8	98	14	.....		.....		....		.....		.....		.....		.....		.....		.....		.....		.....		.....		.....		.....	
Ontario, S.	73	19	526	32	65	43	8	25	50	00	2	85	126	53	2	66	15	00	4	36	6	10	16	55	.....		10	76	55	43	71	10
Oxford, N.	227	68	1,523	111	47	69	37	85	71	50	60	15	217	19	32	47	.....		6	14	14	35	26	45	.....		76	79	156	20	60	99
Oxford, S.	212	80	1,733	109	123	52	43	25	98	00	5	67	270	44	10	15	31	24	15	01	3	50	32	35	4	55	39	74	136	54	133	90
Peel	527	102	3,433	189	55	27	96	00	146	27	19	49	317	03	28	57	71	70	20	15	40	62	36	15	4	33	36	78	238	30	78	73
Perth, N.	124	28	819	39	15	84	20	00	43	00	1	35	80	19	7	80	17	10	7	17	2	58	5	50	3	00	10	72	53	87	26	32
Perth, S.	131	35	1,104	44	13	97	29	50	48	00	8	02	99	49	15	68	.....		3	96	7	50	7	90	.....		15	82	50	86	48	63
Peterboro, E.	55	12	267	14	10	94	10	25	41	30	4	50	66	99	7	30	.....		2	88		50	.....		.....		35	40	46	08	20	91
Peterboro, N.	36	10	123	19	6	00	.....		.....			25	6	25	.....		.....			87	.....		.....		3	50	.....		4	37	1	88
Peterboro, W.	92	14	371	19	4	30	9	75	13	00	9	50	36	55	11	83	10	00		90	4	30	.....		1	75	3	00	31	78	4	77
Prince Edward	210	29	1,317	63	45	00	.....		.....		.....		45	00	.....		.....		2	72		10	.....		6	20	2	50	11	52	33	48
Renfrew, N.	185	51	1,128	60	14	95	32	75	60	00	17	65	125	35	2	60	26	20	5	46	5	85	10	65	30	10	13	83	94	69	30	66
Russell	9	5	136	7	.....		.....		.....		.....		.....		.....		.....		.....		.....		.....		.....		.....		.....		.....	
Simcoe, C.	164	70	1,163	108	72	61	28	25	57	00	16	47	174	33	7	15	27	25	7	39	1	00	3	20	23	15	19	85	88	99	85	34
Simcoe, E.	39	11	577	24	6	42	6	25	20	00	18	72	51	39	9	00	.....		3	81	1	82	5	00	3	50	14	03	37	16	14	23
Simcoe, S.	39	11	277	11	12	74	10	00	20	00	.....		42	74	1	50	5	00	1	38	1	25	.....		.....		12	50	21	63	21	11
Simcoe, W.	168	152	1,514	196	127	55	38	25	98	00	15	87	279	67	49	65	10	00	6	71	5	44		18	27	77	67	22	166	97	112	70
Union	68	18	538	24	9	26	18	50	34	50	16	70	78	96	3	85	18	00	2	04	3	75	5	85	26	75	7	33	67	57	11	39
Victoria, E	104	32	700	50	25	31	18	00	38	00	5	25	86	56	14	30	13	00	3	98	2	00	4	00		54	23	47	61	29	25	27
Victoria, N.	17	4	49	6	.....		.....		.....		.....		.....		.....		.....		.....		.....		.....		.....		.....		.....		.....	
Victoria, W.	150	64	1,377	73	49	09	37	50	50	00	13	85	150	44	4	58	21	60	8	26	5	83	12	20		16	46	89	99	52	50	92
Waterloo, N.	212	61	2,747	122	59	39	51	50	56	00	6	50	173	39	8	69	13	50	11	29	7	40	28	60	6	75	22	21	98	44	74	95
Waterloo, S.	286	60	2,602	71	27	36	68	00	50	00	96	30	241	66	58	55	30	05	14	00	10	80	10	85	4	20	54	29	182	74	58	92
Welland	350	62	1,323	80	134	64	50	50	105	00	86	51	376	65	8	05	81	50	12	89	2	66	23	00	39	96	60	43	228	49	148	16
Wellington, C.	185	80	1,691	87	54	26	42	00	123	00	22	67	241	93	21	75	47	64	11	75	14	25	42	05		30	17	68	155	42	86	51

REPORTS OF LOCAL WOMEN'S INSTITUTES, 1907-08.—*Continued.*

Institute District.	Membership.	No. of meetings held.	Total attendance.	No. of papers read or addresses delivered.	Receipts.					Expenditure.								
					Cash on hand per last report.	Members' fees.	Grants.	Miscellaneous.	Total receipts.	Expense for meetings.	Officers' salaries and expenses.	Postage and stationery.	Printing and advertising.	Lecturer's wages and expenses.	Periodicals for members.	Miscellaneous.	Total expenditure.	Balance on hand.
					$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Wellington, E.	193	68	2,054	104	33 97	49 50	77 00	6 51	166 98	10 25	14 35	9 16	8 15	23 00	10 14	35 44	110 49	56 49
Wellington, S.	114	123	1,009	43	45 55	26 75	68 00	27 65	167 95	11 68	10 00	5 60	6 00	2 00	40 42	17 08	92 78	75 17
Wellington, W.	99	29	682	51	76 52	26 25	59 00	3 62	165 39	8 64	2 70	4 68	7 00	16 00	3 60	51 53	94 15	71 24
Wentworth, N.	220	62	1,485	112	94 10	54 50	50 50	28 85	227 95	46 02	20 00	10 79	10 59	6 95	17 25	11 71	123 31	104 64
Wentworth, S.	430	100	3,146	136	77 19	88 75	123 00	38 27	327 21	63 79	31 90	46 53	34 18	40 30	.....	47 09	263 79	63 42
York, E.	206	57	1,677	96	56 13	51 00	76 00	24 45	207 58	50	15 42	13 70	9 50	14 18	.....	53 90	107 20	100 38
York, N.	143	32	1,026	52	25 00	18 00	42 00	1 76	86 76	2 00	6 00	5 81	4 25	6 93	4 96	19 17	49 12	37 64
York, W.	277	71	2,422	102	38 61	74 50	70 00	17 00	200 11	21 10	12 00	20 87	31 00	18 40	16 90	26 34	146 61	53 50
NORTHERN DISTRICTS.																		
Algoma, C.	87	41	799	73	41 16	22 25	43 00	75 87	182 28	.....	15 50	4 20	3 00	.....	6 88	46 30	75 88	106 40
Algoma, N. S.	109	36	495	69	48 79	20 75	25 00	7 05	101 59	.....	10 00	4 25	.....	.....	5 90	48 93	69 08	32 51
Algoma, E.	11	.....	.....	.....	1 08	.....	10 00	33	11 41	.....	.....	.....	.....	.....	7 70	1 08	8 78	2 63
Manitoulin, E.	117	50	715	92	30 73	16 50	10 00	44 27	131 50	15 00	5 00	5 05	.....	.....	18 10	18 83	61 98	69 52
Manitoulin, W.	74	42	645	67	84 33	15 75	31 00	20 70	151 78	.....	.....	2 57	.....	.....	28 73	48 28	79 58	72 20
Nipissing, W.	12	3	22	3	1 87	2 75	10 00	3 30	17 92	.....	.....	41	.....	.....	.....	2 00	2 41	15 51
Parry Sound, E.	133	77	890	43	109 11	26 25	24 00	33 92	193 28	4 00	.....	3 60	50	.....	23 47	46 12	77 69	115 59
Rainy River, S.	93	36	504	35	21 15	23 75	34 00	2 60	81 50	7 00	.....	4 05	.....	.....	7 00	20 75	38 80	42 70
St. Joseph Is.	69	24	262	18	62 12	18 50	40 00	55	121 17	.....	10 00	6 28	1 00	.....	35 51	13 75	66 54	54 63
Temiscamingue	82	69	771	54	69 82	20 25	43 00	35 87	168 94	1 50	10 00	5 59	3 00	.....	26 32	6 24	52 65	116 29
Thunder Bay	82	32	510	51	26 44	18 25	49 00	121 86	215 55	.....	5 00	3 89	.....	.....	6 50	110 23	125 62	89 93
Wabigoon	56	24	536	26	15 15	12 50	28 00	13 40	69 05	75	2 00	3 48	.....	.....	10 45	8 85	25 53	43 52
Totals	12,204	3,878	93,951	5,394	$ 3,715	$ 2,550	$ 4,361	$ 2,019	$ 12,648	$ 909	$ 1,365	$ 560	$ 531	$ 924	$ 832	$ 2,624	$ 7,745	$ 4,903

Women's Institutes of Ontario.

ANNUAL CONVENTION

HELD AT MASSEY HALL, ONTARIO AGRICULTURAL COLLEGE, GUELPH, DECEMBER 11TH AND 12TH, 1907.

The proceedings were opened by the singing of the National Anthem, after which an invocation was offered by the Rev. Dr. Bethune.

OPENING ADDRESS.

BY HON. N. MONTEITH, MINISTER OF AGRICULTURE, TORONTO.

I am sure that we are pleased to welcome back once more the members of the Women's Institutes to be with us. When your Superintendent asked me some time ago if I would assume the responsibility of presiding this morning, I felt that, from my past experience with the members of this great Institution, I would be entirely safe in coming once more to meet with you. I feel this to be one of the most potent influences in sympathetic touch with the Department of Agriculture. We feel as time goes on that your sphere of influence is widening, and we believe that in this great Province of Ontario there is still much work to accomplish in the home life of our people. We are largely creatures of environment, and I do not know of any other influence that will so mould our characters as that of the home. May I suggest that improvement be made in our highways and roadsides so that the children in passing to and from the school will in future years have pleasant memories of the fences and trees and well kept lawns and roadways. I believe that possibly nothing is a greater influence in the elevation of the people of the Old Land than the beauty of the surroundings. So, I believe a great responsibility rests upon the members of this organization in improving the environment and thereby the standard of citizenship in the Province of Ontario.

One trend of the times which we deplore and which we fear is not making for higher citizenship is that the women are more and more going out into the wide field of commercial activity. Apparently we are getting more and more away from the home life as we understood it in our mother's time. Now this, I believe, comes from many causes. One of the chief causes is that many young people find the home life somewhat dull and uneventful, and they seek wider fields of human industry in the open world, to secure more excitement possibly, and what they imagine higher planes of living. Now, it lies largely in the hands of the members of organizations such as this to give the proper turn to the trend of events. The responsibility is largely yours to uplift and maintain the dignity of work; for, after all, the work-a-day life of the home should at least be given a proper place in our life; and that dignity of home keeping and the uplifting of the standard of the home is, after all, the greatest mission that falls to the lot of women. While there is much to be done in the open world, I believe still that the home life of our people

is of first importance, and, therefore, your work in maintaining the dignity of that home is of the greatest importance in this Province of Ontario. I believe that, as time goes on, the sphere of your influence will widen and that you will reach out into every corner of the province. With an active and sympathetic membership, you can depend upon it that the Department of Agriculture will not be unmindful of your needs—needs of financial support —when you have demonstrated the need of that help. I am glad indeed to have the opportunity again of speaking to the members of the Women's Institutes. I wish you continued success in the broad field of your labors.

ADDRESS OF WELCOME.

By President G. C. Creelman, O.A.C., Guelph.

I deem it a privilege this morning, as I have ever deemed it a privilege, to speak to the representatives of the Women's Institutes of this Province of Ontario. As you come to us year after year in increasingly large numbers, it indicates to me and it indicates to the world the progress which is being made in country places in the upbuilding of the home and the improvement of home life. What more is there to live for than to give to our home the strength that will encourage the boys and girls in the homo to be home makers, therein adding a new unit, a new home in country places, until the whole country has blossomed as a rose and there shall be strength and unselfishness everywhere.

This is a splendid Canadian climate of ours, with its offerings from the southern portion of fruit which vies in deliciousness with that from the tropics, and from the far north the No. 1 hard wheat, the best wheat in the world. We have flocks and herds in such large numbers and quality that our people go to the large city of Chicago in competition with all the States and can bring back the much coveted trophy, blue ribbons, red ribbons, and white ribbons—indicating the development of the live stock training.

We have a climate that will allow us not only to grow good things, but to grow the best. Then under these circumstances, under all the circumstances what a privilege it is to be allowed as boys and girls, as men and women, to live in a country place in a climate such as ours. You are to be congratulated in the first place in being privileged to live in a country place, and in the second place on the splendid strength and the steady growth the Women's Institutes have made in the Province in recent years. I could hardly believe my eyes when I read that there are eighty district Institutes with more than four hundred branches and a membership of eleven thousand members—eleven thousand women in the Province of Ontario who are members in this organization. You are really a great people with a great work before you, and you are already doing things, not talking about them You are coming out to the meetings in numbers which indicate that you are interested in the work and that you do not fear to indentify yourselves with the organization. I cannot help going back to the time when there was only one. From that one the growth in ten years has been marvellous. This growth indicates two things. First, that the time was ripe for the organization when it was established, and, second, that the women of this country have demonstrated that they have in them some good material for organization. There had been a feeling for a number of years that there was an opportunity for such an organization as this, if some one would just grasp it, that the girls of the farms were beginning to leave home and follow the boys to the towns and cities, and there follow their brothers in every line of business. So I say,

what this organization can do is to prevent it—not to keep every girl and boy from going to the city; that would be ridiculous, for is it not necessary that the professions be partially supplied from the country places. I would not advocate that every girl should stay on the farm, that is not possible, but it is possible for us with our organization, for you with your influence in the home and with the Macdonald Institute here to help you in the work, to make the farm life and the home life more attractive than it has been before.

Of course an address from the President of the Agricultural College would not be complete if I were not to say something to you about the workings of Macdonald Institute. Macdonald, as you see it, is the girls' Department of the O.A.C., and I am pleased to say to you it is still prosperous, and the work is going to be still better. The teachers are adapting themselves to the work and the pupils are coming to us with a broader conception of the education they will receive at Macdonald.

At first it was almost laughable—some of the things which happened at Macdonald Institute. Girls who came did not at first understand that they would have to work, and after two or three weeks striving to find their place in Macdonald would come to either Miss Watson or the President complaining that they were put to work and they did not like to work and pay their board. They did not like to work with their hands—they had always kept help at home. We had to show them that they had to learn to do things by doing them, not by seeing them done. Many girls came to us in that mood and had to learn that women's work must be learned by doing it. I am pleased to say to you that in every instance the girl decided to stay. Many girls came with fancy dresses ready to entertain the young men. But each girl put aside her fine clothes, rolled up her sleeves and went to work, until the three months' course was over. Then after the course is finished we hear the girls say: "Why didn't you persuade us to take the full year's course." The classes which open next January are already full: forty-eight new girls after Christmas—mostly farmers' daughters, we are pleased to say. I see back of it all some of the results of Institute work, for the names of many of the girls are familar as the names of some of our older Institute members, and we are very glad to have them at Macdonald. Macdonald we hope is going to stand for larger things than the mere making of experienced cooks, seamstresses and laundry women. I want you as representatives of Women's Institutes to send us your girls for a longer time than three months, so that we may keep them and work out some of the schemes for higher education. We want to teach them to work scientifically, to become stronger women, better mothers of the future, by getting into closer touch with the works of the Creator.

We give you the keys of the College and ask you to make yourselves welcome.

REPLY TO ADDRESS OF WELCOME.

By Mrs. Jas. Gardner, Kemble.

It is my privilege to reply, in behalf of the Women's Institutes of Ontario, to the very warm greeting we have received from the President, our former Superintendent. It is with great pleasure we have listened to the eloquent words of welcome and encouragement, and we who represent many rural homes would recognize and respect the welcome coming from the President of one of the most noted and best equipped Agricultural Colleges in the Dominion. It is a great pleasure to me to have this opportunity of

voicing, not only my own personal feelings, but also the expression of the entire gathering in being called together in this beautiful city, these well kept grounds and this magnificent building. Mr. Creelman has proved himself to be one of those rare characters, who, upon reaching a higher or more lucrative position, is not forgetful of old interests, relationships and acquaintances. We well remember that it was under his management that the Women's Institutes were first organized and fairly established, and with the efficient government of his able successor the membership has reached over eleven thousand, and there are delegates assembled here from all sections of Ontario. This convention is now looked forward to with pleasant anticipation by hundreds of women.

We mean to enjoy to the utmost all you have so kindly provided, and it is no fault of yours if, when we scatter to return to our different homes, we do not carry with us fresh inspiration, deeper enthusiasm and a more intelligent comprehension of the aims and objects for which we are all working. For, in meeting together, hopes are encouraged, motives and aims are better understood, and by discussion and consideration, face to face, of the questions before us, we draw from contact with each other support, encouragement and confidence. There was a time, not long since, when a visit to the Canadian National Exhibition, or some other popular fair, was about all the recreation or holiday trip many of us indulged in, where one was jostled about among a promiscuous crowd of strangers of every race, class and position, and with as many interests and objects in life, but here we meet with friends and workers on one common ground, all wearing the same emblem bearing the motto "For Home and Country." Here we obtain pleasure, information and recreation. The proportions to which this convention has reached only speaks for its increasing popularity. There are many societies for mutual improvement, for philanthropy and benevolence, but I doubt if any of them have any more worthy field than we in our objects and aims of the Women's Institute. I know of a magazine whose motto for the home department is "The homes of a Nation are its Strongest Forts." I once heard the President of a ladies' college say in her address that "Nature had given to woman the highest place in the realm, the first privilege of instilling the principles of love, justice and truth,—love for nature and all God's creatures, justice to do as we would wish to be done by, and truth, that standard of right and wrong which instils those principles which make statesmen, patriots and leaders of the people and lead to peace and prosperity." But there are some mothers who seem to think that a child who is able to evade or quibble with the law is clever indeed, and the positions of respect and trust may be secured without honest effort and perseverance, and so long as we have such mothers will we have juvenile recruits to fill the ranks of poverty and crime. I am not sure, but I think it is Ruskin who says: "The reverence for the law should be breathed by every mother to the child that prattles on her knee. Let it be taught in homes, schools and colleges. Let it be written in the primers, spelling books and almanacs. Let it be preached from pulpits, proclaimed in the Legislative Halls and enforced in Courts of Justice. In short, let it become the political religion of the nation."

I have learned a short rhyme since the last Convention, which I think is well worth repeating.

"Houses are built of rocks and stones, with pillars, posts and piers.
A home is built of loving deeds that last a thousand years.
The house, though but a humble cot, may hold
A home, a precious treasure rich in Heaven's eternal gold.
It is the men who build the houses, with halls and chambers, roofs and domes.
But the homes, God knows it is "The women build the homes."

ADDRESS.

By Geo. A. Putnam, Superintendent of Women's Institutes, Toronto.

It is with a full realization of responsibility that I address the representatives from the various Women's Institutes throughout the Province. This timidity is a natural result of the deep appreciation I have of the power which rests with the large corps of members and the consequent responsibility which must come to one who is given the unifying and directing to a large extent of the work of these Institutes. It is a responsibility, however, which is borne with a considerable degree of confidence because of the assurance that with such a band of earnest workers with the one common object in view, there can be but the one result—success: success so far as extent and permanency of the work is concerned, and success, in a larger degree, so far as good to the individual and the beneficial influence upon the home life of the country are concerned.

"For Home and Country" is a motto which has become more full of meaning and more prized as time has passed, and I am sure that none of us would give it up for any substitute. It is so expressive that it loses in forcefulness with any attempt at explanation or elaboration.

We shall venture to compare our work with that of the Farmers' Institutes as carried on for the past 20 or 25 years; and I would not for a moment belittle the results which have followed the teachings of the excellent band of instructers who have been sent out from time to time to attend farmers' institute meetings. With such men as Dr. Mills, Hon. John Dryden, the late John I. Hobson, Prof. Panton and in more recent years, Andrew Elliott, Duncan Anderson, W. S. Fraser, the Hon. Nelson Monteith and others, the beneficial results to the farmers of the Province was certain. The majority of these men gave some consideration, especially in their evening addresses, to the improvement of the home and the betterment of home conditions, and did much to elevate the farm home and bring the farmer to an appreciation of his importance in the prosperity of the country and the part which he should take in the public questions of the day. Still these workers were handicapped by not having a Women's Institute organization through which to exert an influence. We believe that we have in the Women's Institutes, especially through the monthly meetings held now by a great majority of the Institutes and conducted almost solely by *local talent*, a force which will do more to improve the conditions surrounding home life on the farm than we could have hoped for through the Farmers' Institutes alone.

What about the comparative importance of the subjects dealt with by the Farmers' and Women's Institutes? If the governments of the day can afford to spend large sums of money on experimenting with a view to determining the most economical methods of feeding *raw* food to *farm animals*, should they not be prepared to expend even greater sums in instructing the home makers in, not only in selection of the most nutritious and appetizing foods, but the *cooking* of them, not for the farm animals, but for the *family*. The farmers' task in combining the various foods in their raw state and feeding them to the farm animals cannot be compared with the task set for the housewife in selecting and cooking foods in such a way that they will be at once wholesome and appetizing.

Bulletins are published, reports are issued and addresses delivered upon the construction of the pig-pen, the hen-house and the stable; but we see comparatively little published upon the subject of the construction, equipment, architecture and sanitary requirements of the farm home. Much is

said and more written as to the handling of the calf, the training of the colt and the breaking in of the horse, but how much more important is the wise direction and control of the young child in the home!

So much for the work which presents itself to this organization. How about the workers? What object have they in view? The expenditure of capital and the labor exerted by the farmer, both mental and physical, is for what purpose? For the most part to make more money. True, we have a few *agriculturists* who give much thought and attention and squander a great deal of money solely for the pleasure which they hope to derive from "being on the farm," but the great majority of Ontario farmers, at least, are following that occupation in preference to others, in order that they may better their financial position. The mother in the home is, of course, ever ready to co-operate with her good husband in bettering the financial position of the farmstead; but what mother thinks of *financial* returns when she is training her child in the virtues and morals which go to make up the best manhood and womanhood.

Given the important work which is set for our band of lecturers, officers and members, and the high ideals which they have, the influence exerted will depend upon the numbers together with the system and uniformity introduced. May the Women's Institutes, as indicated last night by President Falconer, "Break down that self-centred narrowness which is so detrimental to the development of that womanhood which is so essential to the development of the nation."

I hesitate to give figures. If we had Institutes established in only 10 electoral districts of the Province, we could with confidence appear before the Honorable Minister of Agriculture and convince him as to the wisdom of giving recognition to the noble work undertaken: but when we are established in 80 districts with over 400 organizations, 382 of which are holding regular monthly meetings for the 11,000 members and their friends, we can approach the Government of the day with the greatest assurance of receiving its support.

There has not been that uniformity and method in Institute work which many have hoped for. It may be, however, that in view of the fact that the great majority of those who have taken an active interest in the formation of the local Institute and in carrying it on successfully, are those who have not had training along those lines which make for business methods in their undertakings. If we had insisted on a close observance of parliamentary rules, many of the societies which have had the greatest influence for good in their respective localities would not have survived the organization meeting. We have looked for results rather than the methods by which those results have been attained. With a more definite system, which is fast becoming established, we confidently look forward to more effective work and more marked results.

The city home with its water supply, bathroom and furnace, affords greater comforts than the average home in the country district; and it is coming to be recognized by the husband and father that, if he is to keep the boys and the girls on the farm and to induce the better class of laborers, both male and female, to come to the farm, he must be prepared to furnish comforts and conveniences somewhat nearer those existing in the home of the city resident. Do not infer that those who enjoy the conveniences referred to would not willingly change their lot for that of the resident of the country. There are many privileges to be enjoyed in the freedom of the country districts which the majority of the city people would gladly come back to, even though they had to sacrifice the city's advantages which loom up so large in the eyes of many living in the country. The day is coming when

life in rural Ontario will be the envy of the city residents, especially those who are compelled to live in the congested parts. Do not encourage the ambition on the part of many country people to some day live in the city, but rather aim to bring the immediate surroundings of the farm home, so far as conveniences and social advantages are concerned, to the level of city conditions; then the lot of the farmer and his family will be in advance of that of the city resident, who takes delight in parading his appreciation of the urban life but who, in many instances, would be glad to have a comfortable home in a rural district.

But we were to say something as to system in Institute work. You will, of course, naturally look to your superintendent to establish and carry out this system. True, there are some lines of work which may be introduced effectively throughout all the Institutes of the Province, but we believe that the greatest good will result when the officers of the branches of a district, whether that includes only one electoral district or several, join together in a conference for the purpose of studying carefully local conditions and needs and deciding as to how the work can be extended and carried on most effectively in the territory concerned. The two county conventions recently held encourage us in stating that this method furnishes a means by which the highest interests of the institute can be served. I, Superintendent, and the noble band of lecturers, are not so well prepared to advise regarding the work in the different districts, as are the leaders in institute work in their respective districts. We cannot speak too strongly in favor of the district officers canvassing their territory most carefully and considering most anxiously the work which will make towards the uplift of the individual and the community; and we leave it with you to help the weak societies, encourage the strong, and organize the work where it has not yet been established. The Department will be ever ready to co-operate in such undertakings. Let us know the needs of your district and we shall assist to the best of our ability with the forces under our direction. It is the intention of the Department to aim at a somewhat more definite line of instruction both as regards lectures and literature. You are aware of course that the general subject of *food values* has received considerable attention during the past two seasons, while special attention was given last summer to vegetables and meats. This work can well be continued, but should, in our opinion, be supplemented by house plans, equipment, water supply and disposal of waste. Enough regarding this at present. Particulars, etc., will be presented in some of the discussions which are to follow.

It would be unwise for me to occupy more of your time at present, especially in view of the fact that you have all read recently some general statements from the Department, upon Institute work, and also because of the fact that considerable time will be devoted to the discussion of specific questions as given upon the program.

As intimated at the outset, we in the Department are fully alive to the importance of the work in hand and have been more than encouraged with the results. While we have sought advice from lecturers, officers and members, we have had no person or persons officially representing you as a body; and I wish now to intimate that we shall, before the convention is closed, ask you, as representatives, to appoint a committee to consult with the Department as to the conduct of the work. We feel the responsibility of our position and in order to attain the greatest success, we must be supported by the strong hands of the organized band of members and officers and lecturers. We shall ask you to appoint two officers and one lecturer; and the Department will select two others, making a committee of five to advise with the Department as required.

The hearty co-operation which has existed between the Institutes and the National Council of Women, as well as the Canadian Association for the Prevention of Consumption and other forms of Tuberculosis, and the Provincial Board of Health, has been mutually beneficial, and we trust that the Institutes may continue to give and receive strength in the growth of this co-operation.

It is a matter for encouragement to each individual here and to the Department of Agriculture to see you in such large numbers. We are assured of a profitable convention. Allow me at this time, however, to state that the success of the work will depend, not upon this convention, but upon the effort which each makes to further the interests of the cause in her own locality. I am a firm believer in the beneficial results following the monthly meetings held in the isolated districts of the Province. The organization does not exist so much for the purpose of bettering the condition of those who are enjoying the best things of life, but rather to raise the general level of the conditions existing in the homes of the country. This work is largely in your hands, and we leave it with you.

ADDRESS.

By Miss Laura Rose, Guelph.

I am sure it gives me great pleasure to preside at one of the largest meetings that we have ever had in connection with the Women's Institute Convention. I think there is nothing that demonstrates so well the growth of the Women's Institute as a gathering such as is here this afternoon. We do not need to talk of it: we have only just to look and see. When I look back at the first Institute and realize the wonderful growth that has taken place, it seems almost too good to be true.

I take great pleasure in introducing to you Professor R. Harcourt, and in doing so I feel that there is probably no Professor on the College staff that is doing more for the Women's Institute along the lines of domestic science research than is Professor Harcourt. He has chosen for his afternoon lecture a subject which to us should be of very vital interest—"Breakfast Foods." I do not know just what he is going to speak upon, but when we think of breakfast foods, we think of Force and all such. For my own part, I think the strength lies largely in the advertisement. My private opinion of the matter is that nothing takes the place of good warm oatmeal.

[Professor Harcourt's address has already appeared in bulletin form (Ontario Department of Agriculture, No. 162), and has been mailed to all members of Women's Institutes.]

I do think that one of the serious dangers of the present age is in our ready-to-eat foods. I think that is where the great danger of the present time is—we do not know what we are eating, and I would like to keep to what is prepared in my own home. I know what is put into it and how it is prepared, and that it is good and wholesome.

I would like to say just a few words to the Institutes. If I had been called upon to deliver an address this afternoon, I think I would have chosen as my subject, "The Manly Sphere of Man." Man has certainly not been brought into prominence in our Institute work. I think this is to be regretted. We find that the mothers and daughters, maids and matrons have all been blamed or praised or their responsibility shown them, or they have received

advice and counsel, but we never hear of the men getting anything of this nature. I think it has been a weakness in our Institute work. It has been said that women are clingers. I think we have all taken the form of the scarlett runner, and the man the bean pole—useful, but out of sight. Even in last night's paper, we saw just a little instance of this. You will have noticed that among the very notable persons attending the Winter Fair is, not the Superintendent of Farmers' Institutes, but the Superintendent of Women's Institutes. We have perfectly covered up the Farmers' Institute; now it is the Women's Institute that we hear about. While it may be flattering to us as a body of women, it is not what we want. It is not what I want anyway. We see another instance of it when we read our society news. Just a little line given to the groom, and he is merely there to make the event possible. How many women can stand up here and talk for an hour at a time and never mention her husband. Now, if I had a really honest, good man, it would be the hardest thing in the world not to let your people know about him.

Man certainly is not considered enough. He does not take the place he should in the home, it seems to me. We heard this morning that man builds the house, and woman makes the home. I do not like the remark. The statement is all right, but I tell you that the man who just builds the house and leaves the woman to run it is not doing his full share, it seems to me. Man thinks that when he has provided for his home in food and clothing, he has done his part, but not so. He should take a very vital interest in the home, in play and studies of his children. He should know where they stand at school. When a girl marries she does not look far enough ahead. Your husband is to be the father of your children, and a man who is good enough to be your husband is not always good enough to be a father. We do not place a high enough standard upon our manhood. The Women's Institute has ever placed a high standard upon the home, but we have left man out of the work too much. As a result our children are not as respectful as they used to be, because the discipline of the father has been removed from the home. I would gladly return to the old, old system of having the father at the head of the home. I think the father should spend as much time as possible in the home. He should spend it with his children. He should play with them that he may teach them honesty and fairness in their play. You see I take it for granted that there are children in the home. You can never make the most of yourself without having a great motive, a motive that connects you with humanity. Certainly there is nothing like a child to connect you with the outside world. When you have children in your home, every child is of interest to you. That is just why our Women's Institute has been so happy in its conception. It has brought many a mother and many a childless woman out from her own little kingdom and has brought her in touch with the outside world. It has developed her in a way that nothing else could. So, I would say that every woman, so far as possible, should feel it her duty to belong to a Women's Institute, not for the good that she can do, but for the good that will come to her by being a member, and, as far as possible, give the men a place. We want the men as well as the women in our work.

AIMS AND WORK OF THE NATIONAL COUNCIL OF WOMEN OF CANADA.

By Lady Edgar, Toronto.

The nineteenth century was called by Victor Hugo, the woman's century. Surely the twentieth is more so. They have come into their kingdom, and by means of institutions such as this one, where we have been so kindly entertained, they will learn to rule it wisely and well. In our country almost all its people are workers—there are very few drones. The men are engaged in a battle of life, striving to obtain a subsistence for themselves and those dependent on them. On the women of the country devolves the duty of building up the homes of the nation. You know what was said by the sage four thousand years ago and I think it holds good to-day.

"Every wise woman buildeth her house." How to build it is exemplified here in the Macdonald Institute.

> "With skill that spares their toiling hands
> And cheery aid that science brings
> Reclaim the waste and widespread lands
> And reign thereon as Kings."

I was much interested in reading in the report of the Women's Institutes that from small beginnings they have grown to a membership of eleven thousand. I am particularly proud to feel that, as affiliated with the National Council, you have added that number of women workers to our ranks.

As many of you, perhaps, do not know what the National Council of Women of Canada is or what it has accomplished, let me give you a short account of it. And then let me speak to you of the different standing committees to which members of your Institutes have been appointed.

The National Council of Women came into existence in 1893 under the auspices of the Countess of Aberdeen, the wife of our then Governor-General. It was formed on the same lines as the National Council of the United States and the Council of Women workers of Great Britain, namely, as a Federation of Women's Societies. It represents all the Provinces of the Dominion. It is not political, for women of all parties belong to its ranks. It is not attached to any particular creed, for members of all the Protestant churches, and of the Roman Catholic church work together in the Council, as do also the adherents of the Jewish faith. Twenty-two Local Councils, from Prince Edward Island in the extreme east to Vancouver Island in the extreme west, belong to the federation and these Local Councils have in affiliation about three hundred societies and institutions formed for every conceivable object. Eleven nationally organized societies, including your Women's Institutes, also belong. Once a year, representatives from all the federated organizations meet in one or other of the principal cities of the Dominion to receive reports, to confer on subjects suggested by his Executive or by the Local Councils, in order to decide on any combined National action that may be desirable, and to recommend lines of work or inquiry by the Local Councils in their several Provinces. It may interest you to learn that at the first general meeting of the National Council in April, 1894, Mrs. Hoodless, then its Treasurer, moved the following resolution:—

"That this National Council of Women of Canada do all in its power to further the introduction of industrial (or manual) training for girls into the public school system of Canada, believing that such training will greatly

conduce to the general welfare of Canadian homes, and that copies of this resolution be sent to the Ministers of Education of each Provincial Government."

This magnificent Macdonald Institute is the outcome of that resolution. At first, opposition was met with, but systematic organized work was continued, until, at the session of the local house in 1895 a measure was passed, authorizing the introduction of domestic science, at the discretion of school boards or trustees, for the first four forms of the Public Schools of Ontario. The Minister of Education (Hon. G. W. Ross) in 1897 stated that the introduction of Domestic Science and Manual training into our schools was entirely due to the efforts of the National Council of Women.

Not in a spirit of vainglory, but because I want to inform you as to the aims and work of this council, I will give you a resume of some of its other achievements.

It has obtained the appointment of Women Factory Inspectors, for factories and workshops where women are employed in the Provinces of Quebec and Ontario.

It has obtained the extension of the provisions of the Factory Act to the Shops Act in Ontario, as regards the supervision of women workers.

It has obtained the appointment of women on the boards of School Trustees in New Brunswick, and the amendment of the School Act, so that they may be elected in British Columbia.

It has brought about very desirable changes in the arrangements for women prisoners in various places.

It has organized in various centres Boards of Associated Charities or other systems of co-operation in the relief of distress.

It has established hospitals in some of its smaller centres.

It originated the Victorian Order of Nurses and has taken a leading part in its establishment.

It has spread sanitary knowledge, especially by means of Health Talks for mothers given by physicians in Montreal.

It has held an inquiry all over the country into the circulation of impure literature, and has been able to do something to lessen it already, as well as to warn parents and teachers as to the very great danger that exists in this direction. It is also working to supply the youth of our country with good sound books.

It conducted an inquiry in all the Provinces into the laws for the protection of women and children, and laid certain recommendations before the Minister of Justice which he adopted when bringing in amendments to the Criminal Law.

Through one of its affiliated societies it is endeavoring to plan for the better care and wiser distribution of women emigrants, than has hitherto been possible.

It is pledged to co-operate with the medical authorities in urging measures to be taken to check the ever increasing ravages of consumptive diseases in this country. It has striven with success, notably in Halifax, Montreal and St. John, for the establishment of vacation schools and supervised playgrounds.

A glance at the standing committees for this year will show the work it is now actively engaged on.

1. *Laws for the better protection of women and children*, of which Mrs. E. C. Edwards, Macleod, North West Territories, is the energetic and able convener. Mrs. James Douglas, Galt, has been appointed on this committee as representing the Women's Institute. If she will refer to our year book

for 1907, she will find what has been done the past year in this department, and also will find two interesting papers written by the convener on "How Bills become Law in Canada," and also on "The Dower Acts of Canada."

2. *Custodial care of feeble-minded women.* Mrs. Evans, 49 Homewood Ave., Hamilton, Ontario, is the convener. Dr. Helen MacMurchy has been appointed to represent the Women's Institutes on this committee. Dr. MacMurchy has presented a very full report to the Provincial Secretary concerning the actual cases in the Province of Ontario who need the protection of custodial care. It is hoped that at the next session of the Local House some action will be taken.

3. *Objectionable printed matter.* Mrs. Waycott, 83 Shuter St., Montreal, is the convener, and her report on page 81 of the year book will show that vigilance is necessary. If Miss Maddock will report to the convener any case that may come to her knowledge, she will be of assistance to the work.

4. *The Press* is under the able management of Mrs. Elliot Brown, General Hospital, Toronto, so well known to us as Faith Fenton. She has secured a column in the Saturday "News" of Toronto which is now the organ of our Council. If the members of the Institute will send to Mrs. Brown items of interest, they will further the work of the Council.

5. *Domestic Science.* Miss Watson's name, as your representative, will add strength to the committee and her suggestions will have great weight in the Council. Mrs. Hoodless is the Convener.

6. *Agriculture for women* is such an important subject that we hope it will receive due attention. We are very glad to welcome Miss Yates as your representative.

7. *Citizenship* is a very wide term and embraces much more than suffrage for women. Dr. Stowe Gullen is the able and enthusiastic convener, and, I notice that another member of the medical profession, Dr. Annie Backus, is your representative. There are still several other standing committees to whom as yet no representatives of the Women's Institutes have been appointed, namely.

Public Health, Supervised Playgrounds and Vacation Schools, Immigration, and the *care of the Aged Poor.* I hope nominations will be made to these important committees.

I want to give you a few words from some of the public men referring to our Council. Sir John Thompson, who was one of its earliest friends, thus spoke of it: "Any movement which tends to bring together the people of the various Provinces, of different opinions, politics and beliefs, will be patriotic in its aim and in its work, and divinely blessed in its results."

Sir Wilfrid Laurier said: "That if the National Council had done nothing else than to bring together women from the east and from the west they had done a great deal towards the unification of the country with its diverse races and creeds. What we want in this country above all things, if we are to become a nation, as with God's help we shall, is to have peace, harmony and union amongst all the heterogeneous elements which the Providence of God has brought into this fair country. For this I look above all things to the hand of woman, and you will agree with me that the hand of woman was made for union."

Hon. G. W. Ross said: "I heard that the Women's National Council had appointed a committee to wait on the Government to ask them to legislate so that industrial training and domestic economy might be introduced into the schools of Ontario. I learned of this afterwards, in a more practical manner, for such a committee waited on me. It will be satisfaction to you

to know that what the committee asked for is now on the Statute book of the Province. Another request was made, that a woman be appointed as Inspector of Factories and Shops where girls are employed. That also is now the Statute law of Ontario. These are indications of the patriotic and sympathetic work and disposition of the Council."

The Hon. W. S. Fielding said: "A meeting of Parliament is a great force and power for good and so with the representatives of the women of Canada. It is a power for good though you do not see it in statistics. The power of organized womanhood cannot be overestimated."

I have given you now a synopsis of the work and aims of the Council. "Unity" is our watchward; "Altior" our motto.

Say not the struggle naught awaiteth
The labour and the wounds are vain,
The enemy faint not nor faileth,
And as things have been they remain.
For while the tired waves, vainly breaking
Seem here no painful inch to gain
Far back, through creeks and inlets making,
Comes silent, floating in, the main.

THE HOME.

By C. C. James, Deputy Minister of Agriculture, Toronto.

Every ten years we have a general stock taking in this Canada of ours, to see what our possessions are and to find out what progress we have been making. We count the people, and, if we have increased by a million or two, we reckon our growth accordingly. In this estimate alone we may be mistaken, for mere increase in numbers is not test of a nation's true growth. Then we go through the mills and factories and count the people there employed, the toilers, the employees, to see whether or not the great hives of industry have been showing signs of increasing business or "busy-ness." We value the machinery and the output and note down the workers as so many "hands." And yet this wealth may be passing mainly into the possession and under the control of a comparatively few people and the nation as a whole not be receiving the greatest benefit of this expansion of work. We may go out into the rural parts and number the horses and cattle and sheep and swine and total up the output of wheat and hay, of butter and cheese, of apples and potatoes, and endeavor to satisfy ourselves thereby that our country is becoming richer.

We call all this reckoning a census, and each time we take stock of our people we endeavor to make it more complete. But after we have taken it and analyzed it, we are not satisfied that it is complete, that it gives us that insight into the make-up or condition of the people that enables us rightly to judge whether or not we are making true progress. It is all right as far as it goes, but you see it is limited mainly to material things, it is concerned only with numbering and measuring and weighing and valuing.

There is something, there are many things, in our people that it does not, that it cannot very well take cognizance of. It does not go below the surface and give us a reckoning of those elements of the inner man that go to make up the real elements of human kind. It tells us nothing as to patience, generosity, cheerfulness, sincerity, devotion to duty and honesty, —those qualities sometimes called homely virtues that play so important a part in the life of every nation. This census may count the houses of the

country and classify them as to their material composition and their size, but it does not claim to step within and set forth the qualities of the homes. It would be well if once in a while our leaders and teachers, our men and women of influence, could make a census of these great homely virtues to see whether as a nation we are making true growth or whether, in the rush to increase our population by numbers, to add to our factories by increase of product, to broaden our acres and pile up our cheese and bacon and beef and wheat, we are not after all overlooking the more important elements that enter into the very warp and woof of the nation's true constitution.

Let me ask you—What is the most important, the most influential building in any nation? You take me to the magnificent and imposing pile within which sits the highest tribunal of the country, the seat of government, the law-making force. But, within there may be gathered a lot of self-seeking and oppressive persons enacting laws for their own selfish advantage and not for the general good of the people. You take me to cathedrals, grand and impressive in their architecture, but lifeless and cold within. You take me to halls of justice, but the very name may be a contradiction of that which is administered therein. You take me to colleges and schools, but the teaching may be narrow, false and unsatisfying. Halls of Legislation, Courts of Justice, churches and colleges, factories and shops, stores and offices do not in themselves represent the full life, the true life of a people, they are not the most important elements in the life of a people; they are secondary to and dependent upon the most important life which is to be found within the homes of the people. The home life is the fountain, is the source whence these others are derived. The life of the store and the office, the life of the factory and the shop, the life of the college and the church, the life of the court and the legislature all comes originally from the home and it is therefore a matter of supreme importance that the life of a nation shall start right as it emanates from the home and permeates all these other avenues in which it finds expression. Make the homes right and all these others will become right: it cannot be otherwise: start with the homes wrong and you need not look for right things in school or store or shop or court or legislature. All this has been put and well put in that old and well known saying, as true to-day as at any other time, "The hand that rocks the cradle is the hand that rules the world."

Am I putting it too strongly when I say that you women of Canada are its true rulers and that the improvement of this country, its uplifting, will come more surely through your improvement than through any other force? That you need improving, I am quite certain you will not deny; that you desire to improve and to be better equipped to carry on this mission of improvement, you admit by your very presence here to-day: and it is a most promising sign of the times in Canada that you are found to-day, not in storming the House of Commons, or in boisterously trying to break up some gathering of men, but in quiet conference discussing your plans, seeking enthusiastic encouragement from one another and being willing to listen to the advice, even from mere men who know less about the needs of your life than you do yourselves. Our only excuse for being here is that we may encourage you and perhaps say something that will suggest some line of thought that may be of assistance to you. Let me repeat,—the greatest hope of Canada is in her women, and the highest mission that you have to-day is in the building up of model homes, where the youth of this country may receive that equipment for life which is the most important, outweighing all the teachings and trainings of school and college, of office and of factory. Let me impress upon you this: the school, the college and the office can never equip a boy or a girl with the most important elements of life.

This brings us to the question,—What are the most important elements of life? The answer to that question depends upon another. What is life? What is the ideal of life? Some people seem to think that it is to amass wealth and the best man is he who gathers together the largest amount of wealth and all that wealth stands for;—Census is their ideal. Others appear to think that the aim of life is to acquire power or influence;—the autocrat of all the Russias would be their ideal. Others appear to think that fame or notoriety is the end to be arrived at. I need not enumerate the many other ideals. You see them exemplified on all sides and you see what miserable failures are the result of this seeking after false or warped ideals. I need not take time to prove to you how vain and unsatisfactory are these ideals that so many are striving after, and how the march of progress is impeded by this striving after false ideals. What a grand nation this would become if only we could have true ideals set before our people, and if the whole nation were permeated with the desire and the determination to work along the best lines. "To do good and to be good," is an old sermon often preached, and yet as full of power and potency to-day as at any time in the world's history. In fact, I do not know that ever it was as important as to-day that we strive to drive out the false ideals and motives of men and replace them by those basic and homely virtues that are essential to the permanent working out of the people's welfare. Need I tell you or try to prove to you that patience and perseverance, cheerfulness and enthusiasm, sincerity and generosity are to-day more powerful in the moulding of the lives of humanity than learning and cleverness and shrewdness. I ask you who are among the older classes (if the ladies will allow me to refer to the fact that even they may advance in years and become retrospective) to look back over the history of those of your life-long acquaintance and tell me whether the homely virtues that I have described have not contributed more to the happy and successful lives of your acquaintance than has the mere cleverness of the school and the college training. Take these qualities out of the lives of the youth and education will become a curse rather than a blessing. How often have you seen the man of little scholastic training succeed because he has been cheerful in his work, generous to his associates, patient in his difficulties, sincere in his dealings with men and persevering in the working out of his plans. John Ruskin says: "On the whole it is patience which makes the final difference between those who succeed or fail in all things. All the greatest people have it in an infinite degree, and, among the less, the patient weak ones always conquer the impatient strong."

If you desire your son, your daughter, your brother, your sister, to succeed in this world, to get the best out of the world, and to make the most of himself or herself, the best equipment that you can wish for such is that he or she be gentle, cheerful, enthusiastic, patient, generous and sincere. Give anyone these, and learning falls into second place. You need not be anxious about the life career of such a boy or girl; you know what future is in store for such a person. You have seen the brilliant student fail in life because of the lack of these qualities. You have seen the student of only ordinary attainments succeed, and succeed admirably, because of the possession of these most important qualities that are not always considered in the awarding of diplomas or the attainment of scholarship. These are essential in the individual and they alone can make a nation great.

Now, where are they to be attained? Where are they to be cultivated in the boys and girls of this country? I answer, *In the Homes*. And the wives, the mothers, the sisters, are the greatest agents in imparting or developing them in the youth of this country. My point then is, that in the home is the

source of the most important elements of true manhood, and anything that can be done to encourage the growth of these virtues in the homes of the people is for the making of the nation. To the women of Canada is entrusted the greatest privilege and the greatest responsibility in the rearing of the citizens of this country. You should realize the importance of this privilege, and you should recognize and accept in its truest form this responsibility. Do not make any mistake on this point. You cannot transfer this responsibility to the school, to society, or to the church. You have in your hands the future of this country, and the place, the only place in which you can best work out this duty is in your homes. I know that our papers are filled with accounts of nations warring against one another, or of clever moves to take advantage of one another, of prize fights and marathon races, of political scandals and of investigations, of the speculations and manipulations of men of wealth and of soulless corporations, of the deeds and ventures of men of momentary importance,—all these represent the outcome of individual life, they are not the source of national life. The work of the home, quiet and unnoticed, is the important element, and though the world may not notice upon the front page of the newspaper or chronicle your work in heavy headlines, it is your work after all that tells in the final summing up. I am not here to flatter you or to deceive you by false praise. I want simply to impress upon you that in your homes you can so direct the habits, the thinkings and the motives of the young men and women and of the older men and women also, that the greatest mass of the people shall move along right lines and gradually obliterate from the daily record of mankind those terrible and detestable things that to-day fill the columns of so many of the papers. Future Canada is to-day rocking in the cradle of your homes, toddling with uncertain steps at your skirts, sitting at your table, receiving impressions day by day in that most receptive period of existence. Shall patience, cheerfulness, enthusiasm, gentleness, generosity, sincerity, the love of the true, the beautiful and the good be a part of the make up of that youth, or are you going to let future Canada depend upon the teaching of the schools and the preaching of the churches? You cannot pass on your responsibility to the teacher, the preacher and the employer. These latter have an influence, a great influence, but their value and effect depend largely upon the primary teaching of the home; the school, the church, the store, the office, the shop, are secondary, the home is fundamental.

I know that there are many, whose opinions we value, who lay great stress upon the school, the college and the training of active business life as the true educators and developers of life. They tell us, cut your boy loose from the apron strings of his mother and send him off to school where he will have to rub up against other boys in the classes and upon the playground; send him away to boarding school or college where he will have the rough edges taken off, the eccentricities toned down and his true manliness developed, push him right out into the business of life and let him get the hard knocks and find out that life is developed by keen competition,—that is what will make a man of him better than the quite, humdrum life of his home. They will quote to you Wellington's remark that "Waterloo was really won on the football field of Eton." There is some truth in all these things, of course, but none of these can or should take the place of the home. The value of school, college and hard business life will depend largely upon the boys possessing those qualities which originate in the home. If he has been started right at home he will develop well under the new training of these other institutions, but, if he has been so unfortunate as to have been neglected in his home, he may make a sad failure under the influence of those severe forces that are to be found awaiting the young man who leaves

home for training elsewhere. There is a danger, a terrible danger for the boy who is sent away from home, without a good home training, in the new competition of life where the survival of the fittest in the rule. They tell us that only thus will there be brought out of the boy what good there is in him. Very well, but the good must be in him or it will not be brought out; that element of goodness must first be found within the make-up of the boy. In these days there appears to be an increasing tendency for us to shift the responsibility from the home and to think that when we pay for the tuition or schooling of our boys we include in that the imparting of those virtues which belong properly to the home. If only we could from the first years of childhood have our boys and girls trained in the essential elements of a true home, we could send them to any school or to any college or out into any line of business apprenticeship without any anxiety whatever as to their development.

I had got thus far in writing this paper when I was compelled to lay it aside for the day. In my next mail came a letter from an old friend, a man who had been one of the most successful teachers in this Province and who had for some years past been engaged in business, rubbing up against some of the brightest business men of the United States. He told me of the death of a very intimate friend. Of this friend he said, "Mr. Blank was one of the most lovable men I have ever known. His every act was courtesy, kindness and generosity. He was a good business man, in his own line unsurpassed, and I fancy even without an equal in the country." Do you not see how those qualities, courtesy, kindness, and generosity, are given prominence, they are the three strands that made up the lovable nature of the man, that made him friends and that brought him respect, confidence and that good name which is preferable to great riches. I doubt not that those sterling qualities were originated and nurtured in his early home life.

What a grand equipment for life's work, duties and responsibilities the youth has whose early home life has sown the seeds of these virtues. Simple and homely or homelike you may call them, but they are sterling, indispensable and durable. I do not, of course, for one moment state that these qualities are not to be found in our best schools, colleges, offices and places of business, but what I do say is that they have their first, their best, their surest beginning in the home, and that the youth having them will make the most of his training in school, office and other place of preparation for life work; and the boy who has not had the advantage of their inception in the home, starts life sadly handicapped. If they are not woven into the fabric of his early home life he may be handicapped or even cursed by the teaching of the schools, the office and the factory.

Look over the daily list of wrecked lives. Young men of ability occupying positions of trust and responsibility, and seek the cause of failure,—defaulters, embezzlers, suicides, wreckers of homes—and ask the question, why? Where is the weakness? What is the motive? You can in practically all cases answer it by saying that the unfortunate, the guilty one is lacking not in ability, not in shrewdness, but in some of those more important qualities that I have stated belong primarily to the home life.

We need churches, we need schools and colleges, we need offices and shops and stores and we need all these of the best and we should strive to improve all these, but most of all we need homes, homes of the best kind, home life of the best form, homemakers and homekeepers of the truest and noblest type, and you are to be congratulated that your mission is to endeavor to help along such an important cause.

Some may say this is well known to all people of ordinary sense and reasoning. Of course the world would be better if we were all courteous and

gentle, patient and persevering, cheerful and enthusiastic, sincere and generous. This is the gospel of true manhood and good citizenship. It is not a new gospel. Tennyson has taught us:

"Howe'er it be, it seems to me
'Tis only noble to be good.
Kind hearts are more than coronets
And simple faith than Norman blood."

And the same message can be found even among the old Roman poets:

"Nobilitas sola est atque unica virtus."—(*Juvenal, Satire VIII.*)

If the improvement of the race then is so easy, why has it not reached perfection long since? Just because it is not "so easy." It is easier to learn mathematics than to learn to be exact and honest in one's thinkings and doings; it is easier to learn how to speak a living foreign language than to restrain one's own tongue under provocation; it is easier to read the classics and to cultivate the liberal arts than to cultivate courtesy and to act in gentleness through all the trying perplexities of life; it is easier to study the problems of biology than to direct our own lives along lines of sincerity and generosity. This is an old problem, as old as the origin of the first family life, it is still a problem because it is a difficult one, and it is only through the strenuous and continuous struggle against selfish inclinations up through and towards these simple yet difficult virtues that humanity improves and develops into the highest and the best.

My paper so far has been a sort of sermon by a layman trying to emphasize the well known and the generally accepted statement that habits are best acquired in youth at home and that habits are of more consequence to a boy or girl than learning, or what is known as cleverness. What need of all this summarizing? Only this, it is important enough to bear repetition, we cannot have it too strongly recognized, and, in these days of rush and worry, of false ambitions and misleading examples, it is well to get back to old fashioned ideas and ideals, to call a halt and see whether or not we who preach to others may not after all be lacking in some of these old-fashioned virtues that are so much needed in the present day. It is important that the work of the Women's Institutes be guided by correct principles. If your meetings, your discussions, your endeavors are not based on these old principles, I fear that your work will not accomplish what you desire.

Here is a practical question. If gentleness and courtesy, cheerfulness and enthusiasm, patience and perseverance, generosity and sincerity are so essential to true home life, how are they to be introduced, how are they to be taught? The question suggests its own answer. There is only one answer: "Example is better than precept."

Perhaps right here you may be disposed to say that this example should be shared by the father and the brother. Quite so, but remember that I am not now talking to the men, and if you will allow me I will right here say that great as is the influence of man in the home, the influence of woman is far superior on the whole to that of man. You have only to read the lives of great men, and to talk with men whom you know, to be convinced of what I am saying. You cannot, you should not, and I am sure you would not care to try to throw off upon the men any of this responsibility that belongs to you, for this responsibility should be one in which you take true and honest pride.

What will it mean in the farm homes of this country to have these homely virtues developed? In the first place, it will tend to lift a great load off the shoulders of the men. The man whose home is cheerful and per-

meated with those commendable virtues will take up his daily task with increased pleasure and will carry on his work with greater certainty of success. In the second place, the boys and girls will be so attracted to farm work and farm life that there will be a ready solution of that oft repeated question: "How shall we keep the boys upon the farm?"

What a host of questions such a subject as this suggests. Perhaps you thought I intended to talk to you upon the question of the farm house; but my subject is the Home not the House. You can have a home in a very cheap house and you can have a palatial house that cannot be dignified by the name of home. The house is only one of the elements in forming the homes. Had we time, we might discuss the farmer's house under such headings as these:

How can we improve the surroundings of the house?

How should a good farm house be laid out so as to be comfortable and convenient?

How should the house be furnished?

What labor saving devices can be introduced so as to lighten the work of the housewife?

How shall we prepare the food and set it forth in the best manner?

Shall we have an attractive living room where the family can best cultivate the social side of life?

Shall we have books in the home, if so, what books?

What papers and magazines should we subscribe for?

Should the farmer's wife and the boys and girls have papers and magazines suited to them or must they also be content with the daily or weekly paper?

How can the farmer and his boys be brought into best relationship with one another and into a sympathetic partnership of work?

Shall we have separate houses for the farm help, or must the farmer's wife and daughters continue to look after the cares of their own family and also take in boarders in a house none too large for their own family alone?

You are discussing questions such as these in your local gatherings, and no doubt you are getting help in these questions and thereby contributing to the big general question of the improvement of the home.

I did not set myself the task of asking these questions or of answering them. I must content myself with trying to give you in some way my idea of the great importance of the home in the life of this country and in trying to prove that there is something more important in this home than the mere house.

My next statement is that the farmer's home is the most important home in Canada to-day. The city man lives amid conditions so artificial and changing that home life is apt to lose much of its original charm. And the boys and girls of the city,—how they are to be pitied! So many of them have never known the delights of rural home life. Again and again they have seen the big furniture van carry the belongings of the family from one part of the crowded city to another and their impressions of life are so filled up with noisy street cars and dusty automobiles, that childhood becomes a strange mixture.

It is December in the city and the snow is blowing in blinding clouds along the streets and around the corners. Six o'clock strikes and the electric light still burns in the office. Six-thirty strikes and arouses John Brown from his desk. With a heavy sigh at the work still undone, he rises wearily from the chair in which he has been sitting for several hours, puts on his heavy coat and starts for home, tired, weary, perplexed. The cool air is so refreshing, it helps to blow the troubles out of his brain. He reaches home,

such as it is,—magnificent, stylish, ornate, luxuriant. After dinner he sits down before the grate fire and reads and re-reads the bundle of evening papers that he has brought home or that have been left at his door. He must read these, he has formed the habit, they have become part of his daily routine. He reads the speeches that were made yesterday in the House of Commons, and comments are read in his face by the smile or the frown that unconsciously crosses his face. He reads of the financial troubles in New York and Chicago; then he hastily turns to the commercial page and hurriedly glances over column after column of stocks. He reads of murders and other equally horrifying events: perhaps he even ventures into the mysteries of that wonderfully fascinating section, the society column. At last he settles down to the editorial page and in the middle of an article that stretches its ponderous length over a column and a half, his head begins to nod and he is off to the land of dreams. Away he goes beyond the city, away into the country, where nestling on the hillside is a little house, a gentle slope of grass leads to the front door, here and there a little clump of waving flowers or a shrub give variety to the landscape; on one side a hedge of cedar or spruce, on the other side the winding road that sweeps past the steps towards the driving shed. A broad verandah with some old fashioned rocking chairs invite to comfort. Within, the furnishings are plain and simple, but an air of sweetness and light blows through every room of the old house, the old home. Here he sees his father, strong, hearty, hard-working, perhaps a little exacting, but moulded in the form of the old reliable pioneer, the man of strong purposes and of straight dealings, the man whose word was as good as his bond, whom everyone respected and admired. There are the brothers with whom he played and sported, the companions of his trips to the woods and the fishing stream and the old swimming hole, and his sisters, bright, gay, rollicking girls who were equally ready for the sleigh ride in winter or to go berrying in summer or to help bind the sheaves in harvest. And last of all there was that one dearest of all, she who with gentle hands and kind word directed and kept the life moving sweetly and quietly, she who was patient with him in his boyish eagerness, kind to him in his trouble, even encouraging him in his studies and by her example instilling principles and precepts that gradually became acquired habits. The log falls in the grate and the noise awakens him. There is a smile upon his face, a new song in his heart and that song is: "Home Sweet Home, be it ever so humble, there is no place like home."

Women of Canada, members of the Women's Institute, you are the homemakers, the homekeepers, you have a mission that should inspire you. Men have done much, you can do more for this country in which we have an honest pride. You have as the motto of your organization: "For Home and Country." Be true to that motto. Appreciate its meaning and endeavor to live up to it. If you are true to your home, you will be true to your country; just as you improve the home, you will improve the country. Remember that the country of to-morrow is in the home of to-day and that the best and highest mission of the young women of this country is not to become store clerks and factory employees, not to shine in society or to meddle in politics, but to become homemakers and homekeepers and to endeavor to inculcate those home virtues that surpass in importance learning, cleverness and the acquisition of richness. *For Home and Country*! A country lacking in true home life will surely perish, but purity, sanity and strength in the home life will develop a country worthy of the devotion, the sacrifice and the hopes of her true womanhood.

THE CARE AND FEEDING OF INFANTS.

By Miss Charlotte A. Aikens, Detroit, Mich.

It is with considerable diffidence that I come before a company of experienced women to attempt to discuss a subject about which, no doubt, many of them feel they know more than most teachers. There is lurking in the minds of a great many women an idea that in some mysterious way the experience of motherhood brings with it an intuitive knowledge of how to care for the new creation. It would be well for babies in general of this were true, but, unfortunately, those whose lifework brings them into close contact with family secrets and family ills soon learn that familiarity with a baby does not necessarily mean an intelligent knowledge of his needs. If the experience of motherhood brought with it a knowledge of how best to rear children, then the Italian and Bohemian mothers of the city tenements ought to be walking encyclopedias on the subject of child culture; for with many, or most of them, race suicide is unknown and a new baby every year is the rule. There is no question they are highly experienced, but we have not yet come to regard them as authorities on the subject of motherhood and babyhood.

"I know all about babies, for I've had six," a woman said to me once. The trouble with that woman, as with many others, was that she knew a great deal about babies that wasn't so. Experience does teach a great deal to those who are willing to learn, but it often seems to teach less in the line of the rearing of children than in most other directions. Experience alone, if it has not been supplemented by reading and observation, if it is not guided by intelligent common sense, is a very unsafe teacher in the business of caring for babies.

"You can't tell me nuthin about raisin' children for I've had fourteen," said another woman to me. The old lady had been referred to me as a pitiful case, entirely alone in the world. "Where are your children?" I asked. "All dead but one, and I don't know where he is," she replied complacently. I was interested enough to press a few more questions. "At what ages did they die?" I inquired. "Oh, they died at most all ages. Some of them died when they was babies, some of them when they was two or three years old; more of them died when they was five, and some when they was six or seven. One lived to be eleven, then he died. Only one growed up, and I ain't heard from him for over ten years. I tell you I know a heap about nursin and raisin' children, and I ain't learned it by book larnin' neither." And she glowered at me as if she half suspected I might be guilty of reading books about babies.

In the part of Ontario with which I am most familiar, it is the custom for the grandmothers and aunts and relatives of the young mother to call and pay their respects to her and the new baby. In addition most of the other ladies of the community call within the first week, and some of the gentlemen. In fact everybody calls. Everybody feels that the young mother needs a great deal of advice and most of them proceed to give it freely. As a parting salutation, most of them say something like this: "Well, take care of yourself, and be sure you don't catch cold." A hundred other dangers may be lurking around, but these all fade into insignificance before this one awful bugbear of "catching cold." The young father soon becomes a prey to this awful danger of "catching cold" and he proceeds, if it is in the winter, to shovel in the coal or to pile on an extra supply of wood to ward off this awful danger of "catching cold."

It is true the little stranger has come from a warm country and needs to be kept comfortable, but the first and greater essential of this little human being is pure air. Men have lived for forty days without food, and for seven days without drink, but no individual, baby or adult, can survive many moments without air. If he is deprived of it, death quickly results. If the air is contaminated, his health deteriorates in proportion.

Please do not get uneasy and think I am going to urge you to carry the fresh air theory to extremes by putting the babies outside to sleep at this time of the year. I am a firm believer in Gladstone's prescription, which applies to all phases of baby life as well as to most other things—"a little common sense." I have no intention of bringing to you any newfangled theories. Even if any of them appear new to you, I assure you that all my theories are close on to fifty or sixty years old and most of them have been discussed more or less, for several hundred years. I shall not advise you to sterilize all the baby's playthings. I shall not tell you that you should not rock or cuddle your babies. To be perfectly honest, I believe in a moderate amount of baby talk. I have even been guilty myself of rocking and cuddling my own very numerous babies, in moderation of course, and they didn't turn out to be such very bad babies after all. But I do plead for a plentiful supply of pure air for the baby as well as for his father and mother, his brothers and sisters and aunts.

There are a great many mothers who are most fastidious about clothing and feeding the baby, but they entirely overlook the need of a constant supply of pure air for this rapidly growing child. An elaborate cloak and bonnet and baby carriage is provided in which he is sent out for an hour, more or less, periodically, but the air in the room to which he returns, the room in which he sleeps and lives may be foul with the fumes of coal gas, onions, cabbage, and other cooking odors; it may be laden with the odors of impurities thrown off the human bodies, but the fastidious mother who labors incessantly to keep the child's clothing clean is certainly unconcerned about the foulness of the atmosphere he has to breathe night and day, for has the baby not had his airing? She would never think of giving the baby dirty water to drink, but she has no scruples at all that keep her from letting him breathe dirty air, air that has been used over and over again by himself and others, bad air which has its direct bad effect on the child's blood. We hear much of the days of our grandmothers who raised a dozen children and perhaps never had a doctor in the house for years. But we forget that we do not live the same open air life that our grandmothers lived. Our houses are not like hers in which the door stood open most of the time, and the big open fireplace afforded a means of constant escape for the impure air. We forget that our tables are so richly spread that they are constantly referred to by newspaper correspondents as "Groaning boards," whereas her table was, if often meagre in its variety, at least simple and wholesome. She lived the simple life, close to nature, whereas we read about the simple life and talk about it and confess sometimes to a longing for it, but in reality we clamor continuously for modern conveniences with all their complications. We wouldn't live the simple life our grandmothers lived, if we could, and the result is, the twentieth century baby is a very different individual to start with from our grandmothers' babies.

It should, of course, be borne in mind that pure air need not necessarily be cold air. A house can be kept comfortable and at the same time well ventilated. A thermometer for a house is not an expensive investment and it may save fuel and prevent much guess work. A temperature of 70 degrees Fahrenheit is warm enough for any normal baby during the day and 65

degrees Fahrenheit at night. After the first three or four months, if the air in the sleeping room is kept even ten degrees lower than that, the baby will prove much less susceptible to colds and chest affections. A convenient method of admitting a constant supply of pure air to a room is to place in the sleeping and living rooms a two inch strip of board inside the lower sash of the window at the bottom. This prevents a direct draught when the window is raised a couple of inches and yet provides for a constant circulation of fresh air. Once or twice daily, and always before retiring, it is well to throw windows or doors open wide and fill the living rooms with fresh air.

I know full well how unpopular this idea of ventilation in winter is, and yet I persistently and diligently teach it and preach it at every opportunity. One great reason why colds are so much more prevalent in winter than in summer is that the air in some houses is always impure in winter. The doors and windows are closed continually. The season for colds begins when the season for closing windows and doors arrives, whereas those who live in tents are practically immune from colds, however severe the weather may be. In most homes every nook and crevice by which a little fresh air might accidentally get in is stopped up. The temperature of the house is above summer heat, and irritation and inflammation of the air passages follows just as naturally as night follows day.

Last winter while visiting in the country I was asked to go to see a lady who was very ill and believed to be threatened with penumonia. One member of the household had died a few days previously from that disease, and there was grave reason for anxiety. It was a palatial farm home, heated by a furnace and with many modern conveniences. The little woman was in a small room with one window, in which she, her husband, the baby, and two other children slept and which during the day was the playroom of other children and the general stamping ground of the family, as the mother's sickroom too often is. Five persons occupied that little room every night. Numerous others used it by day, and yet the window had evidently not been opened for weeks, so securely was it frozen to the sill. She told me I would have to wait till a thaw came to get it open, but I managed to produce an artificial thaw with a kettle of boiling water instead of waiting till spring. The father was going about with a stocking around his throat and had just gone through a week's siege with bronchitis. The children were all coughing. One was in bed with tonsilitis and the mother was threatened with a more serious disease. I have no hesitation in saying that I believe the bottom of the whole trouble in that house was bad air. The woman was a neat little housekeeper. The house itself was clean, but the air in it was dirty, and diseases of the air passages were a natural result.

Most mothers, especially in the country, make adequate provision in the line of clothing for babies, and most of them greatly overdo the matter and pile on the infant a great deal more clothing that he needs. If he is sick and feverish, they pile on still more clothing for fear of this awful thing known as "catching cold," but there are exceptions. While visiting in Philadelphia when I was quite a young nurse, an appeal came to the home in which I was a guest, for me to go to welcome a new baby to a home a few blocks away. The appeal came from the washerwoman of the family where I was visiting. The doctor had arrived some time before me, and, in the interval while he went outside to smoke, I ventured to ask the mother where I would find the clothing for the baby. "To tell the truth," she said, "I didn't expect to be sick before next week, and I haven't got so very much ready. My husband he gave me fifty cents last week. Take it, says he, and go and buy some clothes for the baby. And I did. I went right down town

and I bought it a dear little lace bonnet and a paper of safety pins. Its just the sweetest, cutest little bonnet you every saw. You'll find it and the safety pins in the top drawer of the dresser." I have come in contact with a good many mothers since that time who had not even provided the lace bonnet and safety pins with which to dress the baby, but they all lived in the city.

The question of clothing for the baby is after all largely a matter of individual taste, though I would recommend a few garments in addition to the safety pins and the lace bonnet. So long as the clothing is sufficient to protect, and not so heavy that it will exhaust the strength of the little wearer, so long as it is clean and comfortable and does not chafe or irritate the tender skin, it matters little if it is made of silk, wool or cotton. A baby can be quite as healthy and happy dressed from head to heels in outing flannel at five or six cents a yard as in the most elaborate outfit. After the first two weeks a knitted band, not too tight over the abdomen, is desirable for warmth. A great many mothers have the idea that a baby might possibly fall to pieces if he isn't tightly bandaged, and a great deal of the restlessness of some babies undoubtedly comes from these tight bands. The Creator never turns out slack work. There is no danger of His work falling to pieces, and surely the normal baby's stomach and lungs need a chance to expand. Until a child is two years old, his arms should be protected by long sleeves unless in the extreme heat of summer. The feet and legs, the arms, chest, and abdomen, all need to be sensibly protected at all seasons, even though Dame fashion announces that short sleeves and stockings are fashionable, or that a baby without bootees is years behind the times in baby fashions. Of all senseless things to present to infants, bootees seem to me to be the most senseless. They may do very well as a decoration for dolls, but a baby's knees need to be quite as warmly clad as his toes, if he is to be really comfortable. If you wish to bring an offering to the newest arrival in the family, let it be a sensible pair of cashmere stockings or some other substantial article, and not a senseless decoration for his toes, heels, and ankles.

The time for the baby's bath is a matter that needs to be regulated to suit conditions. If a baby is inclined to be restless at night, an evening bath will help in securing for him and his mother a good night's rest. If he is a good sleeper, the bath may regularly be given in the morning. One part of the bath that is very frequently neglected is the inside of the baby's mouth. A dirty baby face may not be a thing of beauty, but a neglected mouth threatens health. How old does a baby have to be before he has "sore mouth?" is a question a young mother once asked me. She belongs to a rapidly diminishing class who believed that baby must go through a category of infantile ailments just as surely as he cuts his teeth. There is no more need of a baby having sore mouth than there is of his having smallpox, if the causes of trouble are avoided. There is a school boy's riddle which goes something like this: "What place is considered a place for everything?" The answer is "The baby's mouth," and unfortunately there is an element of truth in it. Apart entirely from the dangers that threaten bottle-fed babies from dirty bottles, attachments, and milk, there are other dangers that beset the most carefully fed infant. It is nothing uncommon, when travelling on trains, to see infants trying to suck the upholstered cushion of the seat on which heads innumerable have reposed. The none too clean thumb or finger of the adult is often poked into the infant's mouth in search for signs of coming teeth, to say nothing of his own little thumb with its natural collection of dirt under the nails. All sorts of articles that can be gotten into the baby's mouth are thrust into it, and the need for frequent

cleansing of the inside of the mouth ought to be apparent to any one who gives the subject any consideration. It is undoubtedly true that slight abrasions made by the baby's own finger nails on the delicate lining of the mouth furnish the starting place for "sore mouth" in many a carefully managed baby. It is a trouble that is much easier prevented than cured.

When one considers the methods of feeding babies and children in some homes, it is not difficult to understand why the death rate under two years is so high. Before he has passed his first twenty-four hours, the baby is fed on cow's milk. If he seems a little restless or uncomfortable, he is given a little whiskey and water for soothing purposes. Before very long, he is given sugar in a rag to suck, or a pork rind or a "dummy," which rolls around in all kinds of dirt, is given to him as a "comforter." Of all follies the "comforter" habit with babies seems the most ridiculous. To say nothing of the menace to the child's health from the constant sucking of the filthy article, it usually utterly fails to produce the desired comforting results. The baby who is trained with a "dummy" is the baby that is always going from one tantrum into another. The "dummy" is always dropping out of his mouth and he is kept in a constant state of agitation till some one puts it back again. The "dummy" is only an evil, a foolish contrivance of some ignorant woman in past ages whose example is not a safe guide for intelligent mothers in this age of enlightenment. By the time the infant in some homes has reached the ripe age of six months, he is brought to the table and allowed to share in the boiled tea, the potatoes and gravy, the sausage, pork, fruits, and richly daubed cake. I have even seen cucumber pickles and other tasty relishes added to the baby's bill of fare by some mother who was supposed to be, by experience in motherhood, quite an authority on the subject of babies. The doting father feels bound to contribute his share toward the happiness of his offspring and regularly spends a nickel or a dime at the village grocery in candies for the infant. Every one agrees that nothing is too good for the baby. It is little wonder that in some homes, the foundation of digestive disorder, and a consequent weakened body that is unable to resist the invasion of disease, is laid from the time a child is born. If you venture to expostulate with the mother, she will tell you "They are used to it and it doesn't hurt them." Quite often her view of the case seems to be correct, for the mainfestations of digestive disease are too insidious to cause much alarm till the disease is pretty well established. If the child is not immediately striken with illness as the result of such feeding, she thinks it does him no harm. A few years later the same mother will tell you that the child is not strong and she doesn't know why her children "take every disease that comes along." In spite of the fact that children in the country have abundant opportunity to secure the freshest of milk and other foods, the purest of air, plenty of sunshine, and room to romp and play, one does not spend many hours in a great many homes before the ailments of Mary, or Johnnie, or Lizzie, are introduced into the conversation. Why is it?

The editor of a popular magazine that has a department devoted to the health of the household, which encouraged people to send inquiries to be answered by that department, told me that about four out of five inquiries received related to ailments that are due, directly or indirectly, to faulty methods of feeding.

Though for centuries scientists have been working on the problem, up to the present no one has been able to improve on the supply of food old Mother Nature has provided. No greater injustice can be done a baby than to deprive him of that which Nature has provided as his right. There are, of course, occasional cases when this food fails, or seems to be deficient in

certain elements, but to discard the provisions made by nature is always a serious matter. At this juncture when the question of what to give the baby is under consideration, the advice of some neighborhood authority is usually offered and very often followed. The mother of eleven who has buried seven is considered a walking oracle on baby wisdom and what she does not know about babies and baby foods, according to her own notion, could be put in a very small book. She can talk by the hour and tell you what she gave her children and what Mrs. Smith gave hers, and what somebody else gave theirs. Baby foods of this, that and the other kind are recommended, tried in succession and discarded for something else, until it is little wonder that so many artificially fed babies go away after a few months, leaving hands and hearts empty. It is as true of babies as it is of adults that "what is one individual's meat is another's poison." Every baby is a study by himself. When it becomes absolutely necessary and unavoidable to resort to artificial feeding the advice of a reliable experienced physician should be sought, and every such baby should be considered a subject for a physician's periodical supervision. Experiments with an organ as delicate and sensitive as a baby's stomach are exceedingly risky. To introduce variety into a baby's bill of fare is, to say the least, unwise and often proves a tremendously costly experiment. Those who come forward suggesting this, that and the other kind of foods, may well be likened to that class of individuals of whom it is said that "Fools rush in where angels fear to tread."

In all walks of life there is a tendency to treat the baby as one would a puppy, or a trained animal, by exciting him to perform cute tricks for the amusement of the family and friends. It is not considered sufficient for him to be contented or even to laugh spontaneously, as all happy babies will sometimes, but he must need be tickled and punched to make him laugh whether he feels like it or not. How well you like it yourself? Then we wonder that his sleep is disturbed, that his digestion is impared, and that nervous symptoms early manifest themselves in children who ought to be vigorous in every respect. It is nothing unusual to see a baby turn his head in disgust at the kisses offered him by strangers, and women are the worst offenders in this respect. It is a pretty good rule to reserve such demonstrations of affection or admiration, or whatever prompts them, to the babies of one's own family. By showing his distaste for such foolish demonstrations, the baby shows his inborn good sense, and doubtless many a baby submits, not because he enjoys or approves of the performance, but because he is not big enough to resist. If a child is kept warm, and clean and properly fed, if he is allowed plenty of pure air, and let alone a goodly portion of the time, he is more likely to have a normal well-balanced development.

The question of diet in the baby's second year is most important. Many a baby gets along beautifully during the first year, while in the second year baby's trouble can be traced to improper feeding. Most children are overfed, and fed too often, or have food given them that requires chewing before they have teeth to do the work or sense to use them. I have known of green corn, succotash, beans, tomatoes, cucumbers, and cabbage, all being fed to a baby of less than twenty months. I have had to admit to the hospital four successive times the same two and a half year old boy, who, when at home, was given boiled potatoes in chunks, cabbage, rich meat and gravy in quantity all that he chose to force into his mouth. So long as the child was kept in the hospital, and fed on milk, cereals, mashed potato, and soft cooked eggs, he was happy healthy and contented, but it seems utterly impossible, even after serious lessons, to persuade his mother to give him the same kind of food at home, and to keep food that required chewing away from him.

The last observation which I shall make is regarding railway journeys for babies. American people are noted all over the world for their love of travel and Canadians are not far behind. Even the advent of a new baby is not sufficient to prevent many mothers from indulging in the luxury of travel. A short railway journey to a place that is fairly certain to be an improvement on the baby's home, may be justifiable, but popular excursions and crowded trains are good places for babies to be kept out of. In a number of instances of which I have personal knowledge a railway journey has apparently laid the foundations of the disease that in a short time carried off the little traveller. If the baby is doing well, thriving and contented under home conditions, the wise mother will deny herself the luxury of travel, and meeting with far away friends and let well enough alone.

FEEDING OF CHILDREN.

By Miss M. U. Watson, Macdonald Institute, O.A.C., Guelph.

I feel rather diffident in talking about what to feed and what not to feed children, after an experience I had in connection with my work in Macdonald Institute. We had a short course student who attended a dozen lectures on food and feeding, and was apparently much interested in the subject. She married, and in course of time had a little child to feed. This child had to be fed artificially, and when it was five weeks old, the mother announced to a friend of mine "this baby is being fed according to Miss Watson's directions; she gets porridge every day." Now porridge is all right; we Scotch blooded people know there is nothing better for children; but my earnest young mother was a bit too eager to begin it. I want you to remember me rightly, and shall, therefore, take the last speaker's advice,—refrain from giving you much detailed advice, and talk generally about the feeding of children after they have passed the first two trying years.

Keep in mind that the human body takes a number of years to develop from infant to man, and it is easier to realize that the body must be as carefully fed after the second year is it was before. Babies begin with milk and nothing else, except water and fresh air, and it is a far cry from milk, water and fresh air, to the assortment which the average adult puts into his stomach every day. I am not saying the assortment is wrong for the adult. The grown-up is responsible for himself, and may eat what his stomach can take care of. We do not expect a boy to assume all of life's responsibilities until his body is grown up. No more should we expect the growing child's stomach to deal with full assortments of food. Thus we believe that the transition from the milk, water and fresh air period to the mixed diet of the modern adult should be spread over at least seventeen years. Yet how often the transition is made by the seventh year. This abrupt transition is a great mistake, and I beg most earnestly that you will make it more gradually. You do not expect a man's strength in the growing boy's legs and arms; do not expect a man's digestive capacity from a boy's digestive apparatus.

My study of this question yields two or three general rules and a few "don'ts." It would seem wise to make the food of a child, from the second to the fifth year, consist largely of milk and well cooked cereal foods. Begin with the gruels and forms which will not irritate or injure the delicate stomach, and change gradually to the more solid forms. Bread and plain

crackers are of course among the cereal foods. There is no objection to the use of the very tender vegetables after the third year, but the stronger, tougher vegetables should be tabooed. There is no objection to fruit juice quite early, but seedy fruits are better kept away from children much longer than they usually are. Eggs may be given, but not freely, and meat very sparingly indeed. Teach the little child to chew everything very thoroughly, to drink slowly, and never to drink with other food in the mouth. Remember that for one year the baby lived upon one food alone. The little child does not demand great variety, unless it has been trained to it. The demand is not natural, and the longer you can put it off the better for the little child. After the fifth year the stronger vegetables may be gradually added to the diet and the meat increased, but do not give up the milk and cereals. All seedy fruits should be given with the greatest moderation before the eighth or tenth year, and the skins, stones and cores of others should be rejected. Feed children upon simple foods, properly cooked.

Do not train the little child to whine for everything the grown-ups eat, but leave them something to look forward to in coming years. Perhaps the best time to increase variety is during the adolescent period, when there is more or less capriciousness of appetite. Variety will then be a help in getting through the very trying years when the child is changed from the girl to the woman, or the boy to the man. In these years the child begins to look forward to adult responsibilities and may well begin to assume the responsibility of choosing his food. If you have trained him to self-control regarding foods in the earlier years, you will have little trouble during the adolescent years. Self-control is his great safeguard in these hard years.

Here are a few specific "don'ts" which you may safely heed. Don't train your children to drink tea, coffee or any other stimulant. Children are imitative animals and want to do as you do, but they do not crave these stimulants naturally, and why train them to use what their immature bodies are much better without. Tell them when they are grown up they may do as they please, but at present they cannot afford them, because it takes all the nervous force they have to grow into strong men and women. Don't allow them to eat highly spiced foods for the first fourteen years anyway. Don't allow very rich foods—rich pastry, rich cakes. Have you ever noticed the crop of sickness and disease which follows our Canadian Christmas among the children? There is little doubt that much of it is due to the stuffing which goes on. It is not only the turkey which is stuffed, but the human beings; and the children cannot stand it. Their stomachs rebel and they are irritable if not actually sick. Therefore provide a pretty dessert which is simple and safe for the children's Christmas. You will find them quite as well satisfied as with the plum pudding. It may mean a trifle more thought and time before Christmas, but you will have a more comfortable day after, and the children will be happier.

No individual can stand before you for ten or fifteen minutes and expect to say things which will materially influence the feeding of the children of Canada, but the subject should be studied, and the Women's Institutes should be working upon it. Why? Because you cannot afford to carry on an unsuccessful course of feeding with your children. It takes too long, and costs you too much. How can you begin? Begin by comparing notes and discussing your own experiences, and then decide on the line you will follow. We offer all the help Macdonald Institute can give. Our library is accumulating books on the subject of feeding human beings, just as the one upstairs is on the subject of feeding animals. If you have questions, send them along and we will do our best with them. If we cannot answer

them ourselves, ye will try and put you on the right track for getting them answered.

Take as your text—feed a child properly for the first seventeen years, and no reasonable diet will afterwards trouble it. Think of it; our human body is the machine given us to work with. These seventeen years cover the most important years of the machine's construction. We do not expect good work from a badly constructed machine, therefore we must study and try to have our human machine well built. Poor construction or injury during these seventeen years is irreparable; ground lost then can never be recovered. Doubtless many of this audience are suffering now because their parents did not know how to feed them to the best advantage in the first seventeen years. No doubt you have done a lot of tinkering with doctors and nurses and medicines, but the mischief can never be wholly remedied. Remember the children do not ask to come into the world. The parents invite the children to come, and these children have a right to proper feeding during their helpless and ignorant years. Remember that when you stand up before the minister and your God and promise to bring a child up in the nurture and admonition of the Lord, you promise to look after its bodily as well as its spiritual welfare. The Lord expects you to study and do your best to start that child with a sound body when it assumes its own responsibility.

Thirty years hence perhaps such a plea as this will not be necessary. I believe it will not, but only the hearty co-operation of the women of this country can make it unnecessary. We do not undervalue the responsibility of the fathers of the country, but there is no doubt that the women of our country are responsible for the children's food, whether they do the actual work or direct others.

THE YOUNG WOMAN ON THE FARM.

By Dr. A. Backus, Aylmer.

The part the young woman plays in life on the farm is of more importance than many of us seem to think, and the interest she takes in the affairs of the farm adds to her happiness, and the happiness of others, in fact to the entire home life. The most fortunate thing which can have happened to a girl is to have been born and to have spent her early life on a farm. There is nothing in the world fits so well young women and young men for the voyage of life as childhood in the country.

It has become altogether too much the custom of farmers to try, for the sake of the children, to move into town in order that schools may be more convenient. Well, there are other things in town more convenient too, and it is the influence of those other things that is more of a detriment to the unformed characters of our young people than convenience to a school can possibly be a benefit.

First of all our young people should be grounded in the love of home. There should be an affection for every lane every tree, every brook, every hillside in and about the farm. The voice of the song birds should be sweeter than any choir or orchestra. The knowledge of our domestic animals, their peculiarities and habits of more interest than the "shut in" creatures of the Zoo.

Listen to what that great writer, George Eliot, says upon this subject: "A human life, I think, would be well rooted in some spot of a native land, where it may get the love of tender kinship for the face of Earth, for the

labors men go forth to, for the sounds and accents that haunt it, for whatever will give that early home a familiar unmistakable difference amidst the future widening of knowledge. A spot where the definiteness of early memories may be inwrought with affection, and kindly acquaintance with all neighbors, even to the dogs and donkeys, may spread, not by sentimental effort and reflection, but as a sweet habit of the blood."

The power for good of this influence over all one life who can guess?

Send the girls to school by all means, but keep them in love with the farm home. Let the Friday night's return be one of rejoicing, and the Saturday's tramp over the farm, through the barns and where not, the happiest event of the week.

Do not bring the young women up with the idea that there is something vulgar and unwomanly about taking an interest in the stock on the farm. This is a maudlin sentiment altogether too prevalent in this country. I heard one of our greatest professors say, "I do not know what is the matter with the women of Ontario—they take no interest in the domestic animals on the farm, as if there were something vulgar about it." And he added: "If they could have seen our Queen Victoria selecting from her own herds the animals for breeding purposes. Walking about in their midst—and when from age she was no longer able to walk about, had them led before her, and in this way chose those to be kept and those to be sent away. Surely they would see that an interest in the creatures is neither unwomanly nor bold." If that great Queen, who made England's Court the purest in the world by her life and example, did not consider these noble animals beneath her notice, it ill becomes the women of Ontario to pose as prudes and disclaim any concern about them.

Let the mothers see to it that our young women go forth from the home trained in all the arts of housekeeping, but let them not fail to put this added interest into farm life—the love of our domestic animals. Life on the farm can be made the happiest or most lonely life in the world. Our young women must not be taught to become domestic drudges, thinking only of feeding the men, but they must learn how to make the home a joyous place. The young women on the farm have it in their power, more than any other woman in the world, to make happiness. There is no home in the world so "homey" as the one in the country. Here, instead of each member of the family going away in the evening, each in his own way, the evenings are spent together around the fireside, reading, chatting, music, and all the dear delights of home which it is in the power of our young women to bring there. Have, if possible, an open fire, the dear old fire places of our childish memories. There is a great moral influence in the open fire, high ideals are formed from the glowing coals, witty thoughts conceived from the crackling flame. The memory of the fireside is worth a thousand sermons, and its bright glow in the present holds closer than anything else the girls and boys contented in the home at night.

Now let us talk over together the young woman on the farm.

1. What are her conditions there? Are they all we could ask for? In some cases, yes, and in many others, no. Our country homes are not ideal, and the girls in these homes are too often allowed to forget all their presence should mean in the home. The mother with her many cares, does not always consider that her daughters should be given some responsibility, should also have an opportunity to develop their individuality. Let the young woman have her own room, a place where she can be alone at times, let her fit it up after her own ideas, and let her feel that this room is her very own—nothing makes for content more than this.

2. Her influence and importance on the farm. If we stop to consider, we will readily see there is not greater influence for joy in the home than can be spread by the girl there. The gladness and happiness which can be scattered by one bright, cheerful young woman will fill the house with delight. So let the young women know the importance of her influence here. The boy on the farm who has a sister, has an ever-ready source of pleasure, if she is the right sort. Help the girls to become the right sort. Do not be afraid of laughter and jokes, of fun and frolic—let brothers and sisters become companions. Let the boys help the girls in the house—let the girls help the boys outside—train the colts, drive the reaper, ride to town on errands for the boys, and so learn self-reliance and acquire physical strength.

3. What advantages has the country girl over the one in the city?

To live near to nature, to learn by direct observation the great fundamental truths of nature, which is the foundation of true education; the freedom of the country life, with the health-giving amusements, the pure air, the early hours, wholesome food and simplicity of enjoyments are some of the advantages the country girl has over the city one. The city girl, in turn, has the advantage (if advantage it may be called) of becoming familiar with social doings and customs, of acquiring the knack of meeting without nervousness different people under different circumstances, of hearing lectures, and going to the theatres. The latest play, the latest fiction, are all at the hand of the city young woman, but the songs of our feathered choristers should be sweeter in the ears of our country girls than any orchestra, and the glory of our landscape more beautiful to the eyes than drop curtains and stage scenery, the "sermons in stones" better than lectures, and the "books in the running brooks" as interesting as fiction.

We are so apt to get a false estimate of the great advantages of so-called social functions, and the country girl feels often awkward and out of place in the city home. She thinks there is some secret in their ways and manners, but there is no secret about it except custom. And the country girl who has used her advantages has secrets of knowledge, of happiness, of life, that the city girl can never acquire, and if she enters a city home without any pretence, acts just what she is, she will have the manner of a gentlewoman and need not be embarrassed in any company.

4. How can we make environments for happiness in country homes? This is a question which demands our strictest attention—to make our girls happy in the home. In the first place, permit the young women to have something to say about the home, and the arrangements in the home—let her put away the hair wreaths and tissue paper flowers if she likes, replacing them with natural flowers. Let her use the parlor whenever she pleases, and entertain her friends there—there will be parlors and carpets, wall papers and pictures long after your children have wept over your coffin—and if the evenings were all spent with the family joining in the parlor, and boys and girls were made to feel some of the pleasure of meeting in a social way, it would add to the happiness, help the good manners, and polish the wit of all. Never allow the home to become a mere shelter, with the kitchen for its goal.

5. Have the country girls all the consideration they should have in the financial arrangements of the home? Unhesitatingly, No; and this unfortunate dependence of woman is ever sapping at our national strength. It is sometimes astonishing what the male of the human species demands for a woman's board and clothes, and the uncertain delight of living in the same house with him. To develop strong characters we must give them independence. Let the young women have some definite source of income. The chickens, the

garden, the cows, any of these might be given to her charge, a certain portion from their income being hers to do with as she will. This would help in developing self-reliance, and give a grounding in the knowledge of the value of money, and how to spend it. The custom of sending the boys to college and giving them farms, and sending the girls out into the world with a few flowers in their hats and a flounce on their skirts, and a feather bed and two pillows as their share of the estate, is as discouraging to young women as it is unjust, and is the cause of hundreds of our country girls going out into shops, dress-making establishments, factories and where not—besides forcing them into undesirable marriages for the sake of a home.

Girls should be taught every branch of housekeeping. They should be assisted to acquire all the knowledge possible in this department, but they should also be taught how to take care of themselves. That attention to the person which adds to our self-respect, and the respect of others, should not be neglected—the wholesome pride which refuses to wear soiled undergarments, or stockings with holes in them, should be cultivated; a reverence for one's own body—not the silly decking out of ribbons and artificial flowers—but the pure wholesome respect for this temple of mind and soul. And too, as our surroundings have such influence on our characters, young women should be allowed and assisted to beautify the home—those refining conditions which sway the mind toward noble thoughts, pictures representing some gentle phase of life (not war, and murder, nor gaudy chromos), placed upon the wall; books—those English classics we know so well—Eliot, Dickens, Emerson, Burns, Hood, Ruskin and many others—on the table or on the shelf; musical instruments, and all those helps in life which will enable them to gather a few beams of happiness as they tread along that rough highway called life.

Young women on the farm have so far received very little thought or attention. Some way we always expect that instinctively they will be good; our chief aim is to look after the boys—whom we seem to think will instinctively go wrong, and perhaps that we think so is the reason they generally do. But we must readjust our domestic affairs, and learn that our young women are factors in life which must be considered. When we find brothers and sisters driving off to the polls to vote, when we find an equal division of property for girls and boys; when we hear fathers and mothers, boys and girls, discussing the questions of the day together; when we find a certain cash value put upon woman's work in the home, and in the financial world, then we shall have planted our feet upon the first step of the stairs leading to the Millenium.

Dr. Helen MacMurchy, Toronto: I must be allowed to congratulate my sister, Dr. Backus, upon her excellent address. I listened to it with the greatest profit, and agree with nearly every word she said, unless perhaps what she said about dolls. I do like to see a little girl playing with a doll. But I think what Dr. Backus meant was, not that she would not have them play with dolls, but that she would like to see them playing with other things as well.

I would emphasize very earnestly, from experience in my own work, what Dr. Backus has said about the young woman on the farm, from a city point of view, being in a very good place. I realize the wisdom of Dr. Backus' words, and would sum it up in the words of Ruskin: "Be a person, and respect the personality of others." Every one needs a place of her own and something that she can feel is really her own. She needs a little spot to be alone in.

You do well to encourage the girls, both on the farm and elsewhere. You need to bring out their ideas. You know, ladies, that your daughter is likely to have good ideas, just because she is your daughter, and I would try to bring them out. Financial responsibility! What a difference it makes for us to have twenty-five cents of our own.

Just one word from a city point of view. I would emphatically say, that girls are happier and they are much healthier in the farm home than in almost any other home.

Let the girls go away from home, and have the chance of going back again. There is a certain pleasure in going away just for the coming back. Go somewhere else for a while by all means. Go to Macdonald Institute especially. Do not go to a factory. Then the girl comes back knowing more than when she went away.

There are a great many people coming in to Canada now from other nations who have not Canadian ideas. We must make good Canadians of them. Canada is a good country. Let us fill our corner of it on the farm or in the city, so that we will do our best for home and country.

DISCUSSION OF METHODS IN INSTITUTE WORK, ETC.

Systematic Study for Institutes.

Miss L. Rose, Guelph: I think that in any branch of our work, no matter what it is, the great success of that work depends upon our having system. Probably many Institutes run out of subjects because they have taken them up in such a haphazard way that they feel they have covered the ground, whereas they have only just touched the fringe of those subjects. So, if there could be a systematic arrangement of the topics, I think it would induce members and others to attend the meetings more regularly. An Institute might take a systematic study of the house, starting with the kitchen, dining room, parlor and bedroom, giving one meeting to the discussion of each room. I would suggest that a part of each meeting be devoted to the study of a literary topic. For instance, take one of the poems, and have one of the members select and read the pretty or difficult passages. In that way the busy woman would have her eyes opened to see the beauty of poetry she had not seen before, and become familiar with the poets. I think all Institutes should have some literary topic at every one of the meetings. A systematic arrangement of our topics would induce a larger membership, because when one has heard the programme of one meeting, one wants to come to the next.

How may the Work be extended to all parts of a District?

Miss B. Gilholm, Bright: When a branch is organized officers are appointed, and, as you know, the duty of those officers is to carry on the work in that particular locality apart from the district officers. The duties of the district officers are to carry on or superintend the work of the entire district. When the district officer accepts her office she accepts a very great responsibility. The success of the work in that district depends almost altogether upon the efforts of the district secretary. She must realize the importance of her position; she must impress it upon herself, not upon others. She must have high ideals and must ever strive to attain to that ideal. I

think the better time to begin organization is in the winter time when the farmers' meetings are being held. She should place before herself, as an ideal, the organization of a branch in every point in the district. When she has accomplished that she had done something toward the work of the Women's Institute. Do not organize until there is a ready response upon the part of the women in the locality. If there is not opportunity for organization at one time there may be at another.

How to add Interest to our Monthly Meetings.

Miss M. C. McIntyre, McLennan: When a number of women are gathered together monthly, these must be something which will not only entertain, but also prove profitable to them, in order to keep up the interest. This requires some time and thought, not only by one, but by all, because, although one person may give an instructive lecture or address it produces very little real good, if the others do not discuss and criticize all points, and so bring out new thoughts on what may be an old subject. Our Institute was organized two years ago with a membership of about twenty, which has been increased to fifty-four, and the interest in the meetings has been increasing with the membership. At first it was extremely difficult to get the members to speak, but through much perseverance by a few of the members this difficulty has been almost altogether overcome. One thing which has helped in this direction has been a housekeeping or cooking demonstration at the beginning of meetings. This brings out many useful hints, besides breaking the formality of the meeting, and this brief informality has made the meetings more interesting, as it served to draw out all the members. Another thing which has proved of interest has been five minute talks, a subject having been previously chosen and each member coming prepared to speak five minutes on it. This has proved both enjoyable and instructive, as it requires study and thought from all the members, and gives a unity and interest in the meeting impossible if only one person lectures. After a working membership has been obtained, it might be practicable once in a while to have an impromptu programme, instead of a regular subject, and this will bring out the hidden talents of all. But in whatever way we keep and increase the interest in our monthly meetings, the one great thing to be desired in this, as in every other matter, is co-operation.

How are we to Interest the Girls in the Work of the Institutes?

Mrs. Cumberland, Brampton: This is a question which, I think interests our Institutes very much, for, if we are not able to interest our girls in the work, who is going to carry it on when we are not here? Since coming here yesterday I have been struck with the idea that perhaps we, as mothers, are not measuring up to our responsibility in the home. How are we training our girls in the home? They are being educated in the public and high schools, and in one or more accomplishments, such as music and art. Necessary as these things are, are we willing that our girls believe these are all? We are allowing our girls to believe that their education is complete when these courses are finished. Should we not teach our girls that the highest and noblest idea in the heart of every true woman is that she may become a well informed and efficient housekeeper and sympathetic home-maker? Is not this the life work we are looking forward to for every one of our girls? It will perhaps interest the girls in the Institute work if we let them feel that we are always on the outlook for something that will help us in our work and

make our lives more pleasant. When the meeting day comes, it is so customary to hear the mother speak of the meeting as "my" meeting and not "our" meeting, and the girls are not impressed with the idea that it is necessary for them to go to the meeting. I think that by all means our daughters ought to be taken to the Institute meetings. Let the mother take her turn in staying at home. I feel that in many Institutes the girls have been crowded out a little. In the planning of programmes and the election of officers, the girls have been largely overlooked. The old rule holds good that, if you wish to interest any one, you must put him or her to work. I do not think that we have given our girls nearly enough work to do. Ask one of the girls to give a paper on something that her girls friends know she is interested in. For instance, the girl who is musical—ask her to give something regarding the great musicians, or to sing some of the best songs. The girl who is a great reader might be asked to give a list of the best books to read and tell why she thinks they are the best. The girl who is nimble with her thimble could show how she has made some of the dainty dress accessories. If we can draw them out to the meetings, I feel that they will imbibe a good deal of information, and I feel sure that, if we as Institute workers would rise to our opportunities and interest our girls in our home and Institute work, we would find fewer of our girls becoming restless and filling other walks in life, and more and more we would have our girls taking their true places in the home.

Mrs. Yeo, Mount Forest: I realize how unfortunate it is that our girls are left out of our work so much. There seems to be a general desire to get them husbands, and then they will have to learn how to do the things and to understand the things which we should teach them. The mothers of a nation are its strongest forces and we must realize that the girls are to be the mothers and home-makers of the future, Is it not selfish to keep the good things of the Institute for the mothers? Should not we have topics which will induce our girls to attend? Last week we advertised our topic as "Inexpensive Christmas Gifts," and this attracted quite a number who came for ideas. Could we not have a plain sewing contest once or twice a year? It is more important that we should know how to do plain sewing than fancy work, and we are amazed at the number of girls who cannot even hem. We would enjoy the meetings more if we were teaching the girls something. If our topics were a little more devoted to the interesting of these girls, I think we would have no difficulty in getting them to come to our meetings.

District Officers.

Mr. Putnam: I do not know that I have much to say regarding this subject, beyond what is found in the Hand Book. I think if you look in the Hand Book, you will find there definite statements as to the duties of district officers. In reply to a question "Is it wise to retain a president in office for a second year?", I would suggest that the president be changed occasionally, but it is preferable that no change be made in the secretaryship so long as the services rendered are satisfactory to the Institute. There is no hard and fast rule, however, and this matter must be left to the good judgment of the Institute. When appointing district officers, see that all portions of your district are recognized so far as possible.

Q.—What salary do you think a district secretary should get?

A.—This should depend largely upon the number of members in the district and the work involved. Suggestions regarding this will be found in the Hand Book. Many excellent officers are pleased to devote a good deal of

time and energy to this noble work without asking for any remuneration, while many others find it impossible to devote the necessary time without receiving something for their services.

County Conventions.

Mrs. J. Gardner, Kemble: I suppose you all know that we have had a county convention in Grey. The reports say it was a success. Our convention was the outcome of the great Provincial convention held here last year. We thought that if this convention here was such a source of information and profit to so many, could we not plan something of the same nature close at hand? The secretaries of North, Centre, and South Grey formed themselves into an executive. The convention was held at Flesherton, on the 17th of September, and was well attended. The afternoon session had an attendance of seventy or eighty, and at the evening meeting the hall was packed to the doors. The question was put—Shall we have another? and we are planning to hold another next year at Chatsworth. The expense of the convention was $8.50, which was borne equally by the branches.

Mr. Putnam: Where the local condition make it unwise for one county to attempt a convention, two or three counties could well join together and arrange for a county convention or an inter-county convention for the purpose of looking the District over and considering the needs of the different sections: how weak branches may be strengthened and the work extended into new fields. The officers of the Institute, especially the District officers, should view the work from a broad standpoint and not be satisfied until organization is effected in all parts of the riding. There is no occasion more fitting than the time of holding a county convention for the consideration of the extension and the perfecting of the work in hand. While it is well at the county convention to have addresses upon specific subjects and more or less entertainment, there should always be provision made for the receiving of reports from the branches concerned upon the new features of work which have proved of interest and benefit, also the consideration of difficulties met with and ways and means of overcoming them.

Q.—Should the same person be a district officer and a branch officer?

A—Mr. Putnam: Yes, if is the best arrangement that can be made. Generally speaking, however, it is better that the district secretary be relieved of the secretaryship of a branch Institute.

Q.—Has the branch Institute to pay the district secretary?

A—The district secretary is paid out of district funds. If, however, this officer has done a good deal besides merely the routine work of the district, and the district funds are exhausted it would be only right for the branches to assist in paying her salary provided the funds will permit. Assistance in this way is optional with the branches.

Q.—Has the Institute a right to make a grant to hospitals' etc, out of money made by them,—i.e. the monies received beyond membership fees?

A.—The department does not wish to stipulate how the money which the Institute has made, by special effort, should be spent. If an Institute wishes to help in some local charitable work, all well and good, provided they adopt some special means of raising funds. We believe, however, that it would be in the best interests of the Institute, generally speaking, to confine the funds to purely Institute work and not assist other organizations in a financial way. I think you will find ways and means of expending your money through the Institute which will be beneficial as through any other organization, and which will creat an interest in and maintain the strength of the Institute.

With reference to libraries, it is unwise for an Institute to establish one if there is already a good local library. Better appoint a committee to wait upon the local library board and co-operate with them. They will usually be willing to spend some little money in putting in a few books of special interest to Institute members. The Institute might well co-operate by holding entertainments, etc., in raising funds for this purpose.

Q.—When an Institute is small, how much should the district spend in sending a delegate to the Guelph Convention?

A.—That is a matter which must be left to the good judgment of the officers concerned. It is unwise to devote any large proportion of money in sending a delegate to this convention. When there are several small Institutes in a district it might be wise for them to club together and send one delegate, said delegate being required to report to the branches concerned.

Q.—What do you advise in cases where branches think of disbanding?

A.—I might say that sometimes after an Institute has been in existence for three or four years, it is sometimes hard to keep up the interest, especially when there are several other organizations in the locality. If the members think it well to drop the Institute work, we must, of course allow them to be the judges. However, I think they should consider very carefully whether it would not be well to drop some one of the other organizations and maintain that which includes all classes and sects in its ranks and has such high ideals. However, we do not wish to in any way force this organization upon the people, although we are fully convinced of the power for good which it will assert in any comfunity where competent enthusiastic women are in charge.

Mrs. Crandall: Change the officers and start again. In our district some were nearly gone when the District Secretary advised putting in new officers. Now some of our best branches are those which we thought were going to fail. I would not allow a branch to go down, if I could go and assist them. Some of the district funds might be utilized for that purpose.

Q.—What kind of entertainments are suitable for Institute meetings?

Dr. A. Backus: I would think that any kind of entertainment is suitable for Women's Institute meetings, provided it is really entertaining and instructive, such as local dramatic entertainments. In that way we could bring in the young people. At an Institute meeting which I recently attended I listened to a programme that was so excellent that I could compare it favorably with many concerts which I had heard. Miss Rose mentioned that it is advisable to devote at least fifteen minutes to the study of some author. We do not have enough poetry in our lives, and it would be an excellent thing to introduce it into our Institute meetings. We might also have occasional evening meetings, in fact, old fashioned tea meetings.

MOTHER AND TEACHER.

By Miss Margaret Gray, Toronto.

Farrar says: "He who plants a tree does well; he who fells and saws it into planks does well; he who makes a bench of the planks does well; he, who sitting on the bench, teaches a child, does better than the rest." I believe we all agree with Farrar, that one who teaches and trains children is engaged in very important work.

Now the first person who gives any training to a child is the mother, so she is responsible for the child's start in life. When one stops to reflect on the truth that woman has all the young of the human race under her influence in the impressionable, plastic stage of their being, it is almost staggering the amount of responsibility with which the Almighty has entrusted her. She, it is, who fashions and controls, in large measure, the thinking and acting of all who live under her roof, and sit around her board. It is the mother who gives the character to the home, and we might almost say, decides the character of all who are in it. Be it cheery or depressing, she is responsible, and the children are either helped or hindered on all their future life course, and become blessings or curses to the world by the atmosphere in which they have been nurtured.

For the first seven years of a child's life, he is almost entirely under the control of his parents, principally of his mother, and what he learns in those first years he never forgets. In those years the influence of his parents makes a lasting impression on his mind, which no amount of teaching can ever eradicate. I want to emphasize this point, because too often parents blame the school and the teacher for what is really the result of wrong training at home.

How many mothers do you regard as a success in child-training? How many mothers do you know who have procured books on child-life and training, and are earnestly seeking to understand and properly develop their children? Perhaps next to the influence of the mother, comes that of the teacher. After a child has graduated from the kindergarten, which he attends only in the morning, he is under the teacher's influence for about six hours a day, five days in the week, and this must mean a great deal either for good or evil. I am optimistic enough to believe that in most cases it is for good, for there are many noble characters in the teaching profession. This is as it should be, for a teacher's personality means more to the child than what he learns of arithmetic, geography, and other subjects on the curriculum. For this reason it is not wise to criticize the teacher before the children, for sometimes the teacher you dislike, or think you dislike without really knowing her, may be just the person who is doing your child much good.

The true mother is a teacher, but of a small school, and the true teacher is a mother, but of a large flock. Thus the words "mother" and "teacher" are, or should be, partly synonymous. Hence, we might repeat that there should be cordial and hearty relations between mothers and teachers, but quite often this is not the case. Instead, we find rather a hostile, critical attitude sometimes on the part of both, and the sooner a better feeling prevails the better for all concerned, especially, though, for the children.

It is said that we need our two eyes, with their slight divergence of position, to see correctly any object with more than one side. As children have more than one side to their nature, it takes the vision of both mother and teacher to get a correct view of them.

It has been said that we should learn to study children in a scientific manner, that we may know how best to train their development in mind and body, and take our part in aiding them to grow up with a sound constitution and full mental power. It is necessary to study the children themselves individually, and collectively in groups, that we may know their individual tendencies, good and bad, and that their ever varying condition may be at once perceived. Now a mother sees a child individually at home, and the teacher sees him in groups at school, and in a different environment from that of the home. Sometimes the teacher notices possibilities or defects that

the mother has not noticed. It is the part of the mother to explain what the child's pride forbids him to mention—that Carl is deaf or near-sighted, or in poor health. She can beg the teacher to encourage bashful Bob, and explain that Matilda, though apparently a stupid, stolid child, is really in a state of nervous worry over her failures. In short, the mother can change her child's position in the teacher's mind from that of a type to that of an individual. Parents should confer with the teacher in regard to strong or weak points of children. They should talk with the teacher regarding health, eyes, postures in sitting or standing.

In short, mothers, especially, should know personally the teacher of their children. They will then be in a better position to appreciate her work, and to understand in some measure, at least, the reports that children may carry home. Very little reliance can be placed in children's stories of school affairs, not because they do not wish or intend to give a true version, but because their moral faculties are undeveloped, and they cannot distinguish very clearly between right and wrong. What to children looks like a very small misdemeanor, may be upsetting the discipline of the whole class, and may be an oft-repeated fault that is an annoyance to the other pupils as well as to the teacher. If there should be something that you cannot understand in a teacher's course of action, do not discuss it before the child, but go personally and in a courteous way ask for an explanation. And just let me quote here what some one has written about a teacher's life. "Psychic influences from forty or more children of varying dispositions, home influences, and doubtful physical condition, befog her, hold her, sway her, and yet she is expected to meet every emergency wisely. Under the steady fire of temptation and the irritating influences of many different temperaments hour after hour, she must be both judge and jury at instant notice. What human being could stand such a test?"

If you are passing the school at an opportune time, call in, and, if you can conscientiously do so, speak a few words of praise, or, if you cannot call, send a cheery note. The teacher might reciprocate, too, by telling the mother of good points in the child's character and conduct that are the result of wise training at home. We are all women workers together, and we should encourage one another whenever we can.

It has not been the intention in this article to speak of what the mothers can do for their children in order to make their school life pleasant and profitable, but we would suggest such questions as the following for discussion by the mothers in the Women's Institutes:

(1) Does my child get sufficient sleep in a well ventilated room so that his brain is bright and active when he goes to school?

The need of plenty of sleep throughout the entire developing period cannot be unduly emphasized, and to this end quiet, well-ventilated rooms and separate beds are necessary. Young children should retire soon after a light supper. Studying, playing or reading by artificial light may interfere with the rest and recuperation required after the fatigue of the day. At an Institute meeting this summer a lady told me her little niece was so nervous after going anywhere in the evening that she could not sleep until far into the night. How much sleep do you consider necessary for a growing child? As mothers and teachers we have sometimes blamed a child for naughtiness or laziness when lack of sleep was the explanation of his conduct. There is the time from the eighth to the twelfth year, known as "the period of weak heart." Many boys and girls are stunted for life or succumb to infectious disease from excessive burdens imposed during this period, when the heart has not kept up with the rapid growth in body length, and is

barely able to maintain the circulation of the blood for ordinary mental and muscular exertion. A child is least fitted at this time for the extra demands made upon him for running errands and doing all sorts of chores, which he usually does clumsily and tardily because of excessive fatigue. Are the children asked to do too much outside of school hours, and do they get enough sleep to thoroughly recuperate after a day's activities? A case is on record where a boy was kept at work at home after school till midnight, but such cases we hope are rare. Teachers have said that exhaustion in children is often due more to mismanagement at home, than to work in school. It is reasonable to suppose that this is the case when a teacher finds a child better at the end of the morning's lessons than at the beginning.

Having emphasized the need for lots of sleep, the next point to consider is the ventilation of the bedroom. Is it any wonder that children complain of headache and sick stomach, if they have slept in a room where the windows were tightly closed, and where no fresh air had access? At night lower the windows generously; not an inch or two, but all the way down, letting in plenty of outdoor air, remembering always that you cannot let in too much fresh air. Wise doctors now prescribe fresh air for croup, colds, pneumonia, tuberculosis, whereas for years it has been thought that cold air would be fatal to persons suffering from any of these diseases. A close atmosphere renders the blood impure. The proper way to guard against this menace to health is to ventilate the sleeping room by lowering the window from the top and raising it also from the bottom, so that there is a constant current of fresh air circulating through the room.

Earl Grey says that, on entering a town or city or village in the morning, he looks to see how many open windows there are, and unfortunately he sees too many tightly closed. Let us get one point correctly fixed in our minds,—that the greatest tonic that God has given us is the fresh air; whether it be cold or warm, rainy or sunny, snowy or murky. It is always healthful, and the finest element that we can take into our systems. Unfortunately to most of us "night air," rain or snow, or any sort of inclement weather has meant dampness and consequent danger, but we know now that this theory is absolutely fallacious.

(2) Do I give my child plain, suitable food at regular intervals, so that indigestion and sluggishness are not retarding his progress at school? What are good menus for school children?

A heavy meal draws blood from the brain t the stomach, and if a child comes to school right after eating, perhaps bolting, a heavy breakfast, the blood needed to make his brain active is required in the stomach to digest his food, and inability for mental effort is the result. The habit of taking meals regularly and without being late or hurried, is just as important as the kind of food provided. Meals taken at home with due order will give a better digestion of the food and better nutrition of the body and brain, than snacks of bread and butter or odds and ends of food taken irregularly. Usually speaking, pupils who come from homes where plenty of good whole-wheat bread and butter are used instead of cake, and where milk is drunk instead of tea and coffee,—from homes which provide a variety of plain, nourishing food,—accomplish more work and have better health and dispositions. Do you allow piecing? The mothers will have to decide just the right kind of meals for their own children, considering their age, distance from school, etc. It need hardly be added that a boy who, for instance, gets his breakfast at eight o'clock and walks but a short distance to school, needs a different breakfast from a boy who gets his at half-past six or seven and walks two or three miles to school. The scientific students of dietetics declare that a child

requires about four times as much carbohydrates, (starchy food), as he does proteids, (meat foods), and that he should have h lf as much fat in his diet as he has meat. How much meat do you consider it wise to give a child? I was told of a mother who gave her children meat three times a day, and their skin was almost loathsome. If an adult only requires meat once a day, surely that ought to be enough or more than enough for a child.

What about the lunch basket for the boy or girl who is unfortunate enough not to be able to get home for the noon meal? Instead of regarding the school lunch as something which can be hurried over at the last moment, the mother should plan for it as she would for any other meal of the day. There are many palatable, nutritious things that can be put into a lunch basket without much trouble, if, when preparing dishes for the home table a little salad or minced meat, or dessert is reserved for the school lunch. Some mothers will doubtless be experts in preparing dainty wholesome lunches, and a profitable time could be spent at an Institute meeting, if they would give some of their menus to other mothers, and they would probably get new ideas themselves.

(3) Do I take an intelligent interest in my child's studies, and make it possible for him to do his homework under the best conditions? Does he work for my approbation as well as for that of the teacher?

Most parents like their children to have some homework, but too few of them manifest sufficient interest in the work their children are given to do at home. It makes a wonderful difference to a child if he knows that his homework is to be kindly but critically examined by his parents before being shown to the teacher. I have had some excellent work done at home by my pupils, and my watchword has always been "Quality rather than quantity." You can materially assist the teacher and help your children by supervising the homework.

(4) Do I see that my child has suitable books to read? Do I read with, and talk to him, so that he has good ideas and has his mind fed as well as his body. In this day of cheap good books, surely the children should not be shut out of a beautiful world that is ready for them, if they are but wisely led into it. Parents who fail to talk to their children about life and its possibilities, about the sacredness of their bodies, about nobility of character, about honour and purity, and who fail to keep the confidence of their children, are making a grave mistake. Children whose parents do not talk with them or supply them books to read have such a pitiable dearth of ideas that they can scarcely write a composition on even the simplest subject.

(5) What is the sanitary condition of the school, and of the drinking supply; are my child's life and health endangered by improper ventilation and cleaning of school, and by stagnant or foul water?

The cleaning of schools should certainly interest mothers next to that of their own homes. This may be their first civic duty. Yet I heard of one woman who was more interested in missions than she was in the school her own children attended. How is the dusting done in your school, with dry dusters or with damp or oiled cloths? The children troop in at nine o'clock with warm moist throats, eyelids and nostrils, all ready to catch floating germs, if there are any, and there certainly are, if the dust has been not removed but flicked about with a dry duster. Where so many children are gathered from many kinds of homes the danger from the presence of disease germs must be greatly increased over that of the private house. In dirty school-rooms, poorly ventilated by windows and doors, compared with well-ventilated rooms, the proportion of bacteria in the same volume of air has been found to be sometimes as great as six to a hundred. Dust is an irritant

to eyes and air passages, and causes what we call "a cold," when it is really not that at all. Someone has said, "Is it not peculiar that dairy barns and cows are of more sanitary importance to the public than our public schools and pupils?" What about the drinking supply in your school? Do all the pupils use the same cup, or does each child have his own cup? After summer holidays, is a lot of water pumped out of the well before the children are allowed to drink any? It is a well-known fact that immediately after the opening of the public schools in the fall there is a marked increase in the diseases of children. Have you noticed that, and what are the reasons for this increase?

(6) What are we doing to make school life more attractive and beautiful for the children? By having schools attractive and beautiful, artistic and healthful, we may contribute to future communities the possibilities of a more healthy and vigorous manhood and womanhood. Have we considered that possibility, or have we been content to send the children to old schools with uncomfortable, unsuitable desks, no ventilation system, plain walls, poor pictures, and everything lacking in beauty? School children spend about half of their life during school age in the school-house, and are compelled by law to attend, so the equipment and environment should be the best we can provide. Who can estimate the effect of beautiful surroundings?

Lack of time and space makes it quite impossible to say even what one would like to say on this very important subject, "Mother and Teacher" but if the members of the Women's Institute will seriously consider it and discuss it, much more will be added and much good will be the result.

Let us as mothers and teachers not think of education as book-learning or the passing of examinations, but as "the leading of human souls to what is best and making what is best of them." Let us strive to have the school enforcing and completing the educational work of the home, that is, school and home working together to educate the child.

Some books that would be helpful to the mothers in discussing some of the above questions, and in getting broader ideas of child training and development, are the following:

1. "School Sanitation and Decoration."—By Severance Burrage, S.B., and Henry Turner Bailey.
(2) "The Hygiene of the School-room."—Barry.
(3) "School Hygiene."—Hope and Brown.
(4) "Life of Froebel."—Denton J. Snider.
(5) "Fireside Talks."—Patterson DuBois.
(6) "Jean Mitchell's School."
(7) "Children's Rights."—Kate Douglas Wiggin.
(8) "Through Eye-gate and Ear-gate into the City of Child Soul.

MEN AND WOMEN OF THE FUTURE.

By Miss Mary Bell, St. George.

Someone has asked if an Institute worker is a prophet or a teller of fortune. Might it not be well for each one to look forward once in a while?

Recall the Institute motto: "For Home and Country." Have you ever been impressed by anything peculiar in the wording of that phrase? Notice that Home is placed first. The most important institution in our social system—in the universe, in fact,—is the Home. It is even more important

than the church or the school. What the numberless springs are to the river, the homes are to the nation or country; just as the water of the river is pure or impure according to its source and the soil over which it has travelled, so the quality of the national life is determined by the character of the homes from which it draws its chief supply. If these are defiled, the whole nation is contaminated.

As one goes about the country in the spring of the year, the attention is drawn to the preparations that are being made for the harvest that is promised at the end of the season. All over, this is seen, in the city and in the country, whether it be in the flower-box of the window, in the garden or in the field. And what is it one sees? Simply the preparation of the soil to receive the seed that is to bear fruit. An intelligent farmer or gardener would laugh to scorn the person who would sow the seed without this long preparation of the soil, and then wonder why there were not good results.

Even before the seed was procured, was not this enrichment and cultivation of the soil begun? Now why is there so much trouble taken, when time, labor and expense are involved, and one only expects to sow some seed after all? Ah! but the seed contains the life or germ of life which has to be nourished. May our women not be like that one of whom it was said:

> "A primrose by the river brim,
> A yellow primrose was to him,
> And it was nothing more."

The primrose is something more than a bit of yellow beauty—it contains life which is waiting to be cared for.

But after all, these flowers and the seedtime and harvest are only material things necessary for the maintenance of the race. They are for sustenance, and yet what a lesson they might teach. There is unlimited philosophy stored up in their beautiful blossoms or even in the hard-shelled seed, small as it may be.

There is a legend that the Germans give to their friends at Christmas a "Wonder Ball." This is a large ball of yarn, and the one who receives it must knit something with the yarn. As the knitting proceeds, one begins to find all kinds of gifts and useful articles in the yarn. It only has to be unravelled, and they are ready to be picked out by the one who has the patience to find them.

The seed that is prized for its reproductive power is just like this wonder-ball. It contains all the meaning of life. Have you ever thought of that? That life in plants is the same as life in people? That which is necessary for their existence is also necessary for the existence of human beings.

Look at these seeds of life. Are not the little children the germs of the future men and women of the nation? As such, are they not entitled to at least as much consideration as the flower seeds, or the field of grain which is sown? There is great pride taken in a fine crop, and it is talked over with the neighbor and exhibited with all the glory that is rightly due to the one who has been the means of producing it. The boast is even made of how much work has been necessary to produce this crop from the tiny seeds. This is all right and good.

Compare this with the children or seed-babies of the future. Of course they are provided for, is heard from one and all. Have they not good homes, all they can eat and wear, and are they not free to develop as fast as they can? Yes, but are they given all the attention that is necessary for development in every way, so that the best of men and women will grow out of these seed-babies, the men and women to make this nation the best in the world?

Are their companions all that they should be, for the seed-babies are ready to absorb everything that comes in their path, just as plant-seeds partake of all that is near them.

Did you ever notice sweet peas growing and blossoming? Perhaps one year there are red blossoms and pure white blossoms, but gradually they become mixed and there are red and white streaked flowers on one plant. If one desires to have a particular kind, they must be watched over very carefully—in other words, the seeds will not "come true" unless they are guarded from all harmful influences and tended daily.

Often it appears as if children received all the attention due them. What pride a mother takes in the cunning ways of her children, and how the father delights in the little girl running to meet him, with face uplifted for the kiss she is sure of, and the romp that follows. However, these are not the times when the real cultivation of the seed-babies is being accomplished. This play will not take the place of the hard work that was done on the field of grain, for instance.

Do you remember that verse in the old School Reader:—

"Between the dark and the daylight,
When the night is beginning to lower,
Comes a pause in the day's occupation,
That is known as the Children's Hour."

This is the time for confidences, for the father or mother to make companions of their children and find out what they are absorbing, instead of merely treating them as playthings.

You know these seed-babies were given to train into the best specimens of manhood or womanhood that it is possible to produce. This is not easy by any means. It means, first, a great deal of toil daily to keep a home for them; it means, next, a great deal of thought and study to keep pace with them, and to guide their developing minds into the best channels. Here is where the father has special opportunity to cultivate the soil, ready for the seeds to be sown by himself, the mother and the teacher in school.

Just take this wonder-ball of plant seeds, which was spoken of before. How far its influence may extend! The children are always fond of flowers, and, if a father will take them for a walk in search of wild flowers, what a treat can be in store for both children and father. Perhaps some fathers do not agree on this point, for it may be a nuisance to have to devote themselves to the children for more than a few minutes' play, but the excursions will repay them for their trouble, if they keep in mind this wonder-ball of the flowers and seeds.

Have you read any of Margaret Morley's books on the relations of plant life to human life? They are very entertaining and instructive. This is a quotation from her "Renewal of Life." It treats of the parents' opportunity to enter into and pave the way for the child's difficulties in life and studies in school—botany in particular. Also how the child's character may be moulded at the same time.

"The child's pleasure in nature should be increased, not lessened, as a result of his study. This will almost never be the case where the first instruction is purely technical. Nothing, for instance, has deadened the interest of children in plant life so much as the study of botany. The work is approached at the wrong end. Let the parent tell the stories of the flowers, and the child will respond to the study of botany. Otherwise, instead of a clear stream leaping joyfully through the woods and meadows, finally to reach the boundless ocean, it resembles rather a motionless pond, the

surface of which is covered with debris. True stories of plant life can be, and should be as interesting as any other stories.

To illustrate—the wild rose, looked at simply as a thing of beauty and perfume, becomes yet more interesting to the child who watches the bee gather the golden pollen with the nectar. There is a bond of union between the flower and its winged guest, that begets an altruism which later becomes the corner-stone of character. When the child learns that the seeds of the flower have to thank the bee for their life, the mind glows at the thought of this relationship in which each of these charming creatures practically preserves the life of the other. This may also teach the child to respect animal life. (Note the child pulling the wings off insects.)"

In walking with the child, teach him to admire the clusters of flowers growing against the green moss and dark roots of trees. Does not this call up a picture in your own mind of similar rambles for wild flowers in your youth, and all the pleasures attendant? Teach him to pick only a few of the flowers, so that other children coming after, will be able to see them. Teach him to pick a few, or else more solitary flowers that are lonely and perhaps will not be reached by the bee with the pollen.

Better is it to look around for similar flowers less beautifully placed, as he cannot carry them all home anyway, and the mind picture of the cluster would not then be destroyed. He will become more observant, also less selfish, instead of merely gratifying his pleasure for plunder. This will give poise and self-control.

Margaret Morley tells of so many ways in which the facts of life, which adults have always known but never applied, may be taught to children by stories of birds and other animals, so that really one need not go outside of nature stories to instruct and yet entertain.

Now in that pause in the day's occupations—in the Children's Hour, when the father or mother draws close to the child or seed-baby in an exchange of confidences, there will probably be a surprise in store for the one who has perhaps carelessly tried this experiment, by finding that the child has grasped the vital truth and is profiting by it. Then one could go further and encourage the child to experiment in nature with plant-seeds.

Every year at the Ontario Agricultural College, the experiments in the experimental plots are along just the usual lines followed by farmers who are saving the best seed from one year's crop to have a strong, vigorous growth the following year. The child will soon appreciate this fact, if his experiments with seeds be guided by his father's knowledge. For instance, he will expect to develop a bean from a bean; also a poor, weakly plant from a poor seed, and a strong, healthy plant from a good seed. At the same time he will be preparing his mind for the truth that is to follow in his own particular hour of confidential talk.

Mary Wood Allen says: "You can see that, if every child were to make himself or herself the strongest, best and noblest person possible, it would make a great difference in the individuals of the human race in a few years. We older people are trying very hard to make the world better, but the time when we could have done the best work was when we were young, even when we were little children."

Suppose, then, that the men and women of the future, or our seed-babies of to-day, learn these truths through nature, or any other method that is interesting, how much will have been accomplished toward the strengthening of the nation by the individual making the best of himself. The surest way to reform the world is to realize of how much value are the little children. The children themselves are not too young to realize this fact, if they are

taught what it means to keep themselves pure and strong, just the same as they had to guard their seeds to make them come true.

When a man dies and leaves his property to some one, that person is his heir and the property is his inheritance. But parents give other inheritances to their children, such as certain qualities of temper and ability, pure thoughts and high aims. Some of these are acquired inheritances which are developed in the children during their training; others are the natural inheritances which belong to the seed-babies from the beginning of time, and which may be passed on to future generations. Note that they may be passed on. Does that not denote that there is a possibility that they may not be passed on? You know the English custom of property being entailed or passed on from one generation to another—well, this inheritance of seed-babies is not entailed, if we do not desire it to be. For instance, you have seen people who have inherited certain tendencies, and yet, by training, these have been overcome to such an extent that one would hardly dream of their existence. Is it not probable that this tendency or inheritance will not be passed on to another generation? So then it lies in your power to make those acquired inheritances or qualities outbalance those others by the home influence. This corresponds to the work on the soil before and while the seed is maturing.

You cannot accomplish this, however, unless there is comradeship and attractiveness in the home. It is not necessary to have an expensively furnished house to have an attractive home. Mrs. Richards says: "The house in which a family lives is a sort of outer garment which expresses the standing in the community, the taste, the ideas of the persons living under its roof." Even more expressive of the character of its inhabitants is the interior of the house, its simplicity or its crowded tawdriness. A room always retains something of its customary occupant which is noticeable to a stranger who enters it for the first time. A neat, bright and attractive home, even though it be poorly furnished, is a true index to an innate refinement of the occupants, and it is always this simple but bright home that will influence the seed babies in the right and best way.

Take the subject of furnishings—a few at least. There are two requisites for the refined home—good pictures and good books. No one needs to be rich to secure these luxuries. It is possible to buy very good productions of the masterpieces of art at a moderate cost, and the best books are often cheaper than the latest books of fiction. These very books on nature by Margaret Morley, John Burroughs, etc., are of interest for adults and children alike, and have an educative value and an elevating influence that is priceless. A taste for the best books should be developed, as it will be a never-failing source of delight both to the child in after life and to those with whom he comes in contact.

Of course one kind of book will not suit all people, and care must be taken to select those suitable to the different individuals. Many a child has formed a distaste for reading by having a book forced on him, the subject of which was uninteresting to that particular child. The children's likes and dislikes cannot all be run into one mould, but they can be influenced to a large extent towards a good channel.

Ruskin says: "Here, in books, it is possible for us to choose our friends, and from the very best on earth; but, because we can keep them waiting around us all day long on our bookcase shelves, we never listen to a word they say."

Again one sees boys and girls who are great readers, but they do not seem to choose their friends, their book-friends, wisely. They like to

associate with robbers and pirates instead of with the beautiful facts of history, and nature. Choose some well written children's books that will not foster this love of excitement and see how delightful they are. Those door-yard stories by Clara Dillingham Pierson are always entertaining. Did you ever estimate how much money is wasted on trivial things, which could buy one good book a month, and so build up a good library? You will be surprised at the result.

Another great factor in an attractive home is the family table. First, it must be neatly laid. Clean linen, although not of the finest, taste and simplicity in the arrangement of the table appointments, and perhaps a flower or plant are all that are essential. This with good service shows true refinement. One may think it too much trouble when tired to wait properly on table, and gradually these things slip out of grasp, then the table becomes simply a meeting-place to see who can eat the fastest.

What a difference between this picture and the family where each is alert to the needs of the other. This thoughtfulness for the other members of the family should be developed in the children. Let them be trained to save the mother's steps by waiting on the table, rather than the mother make herself a slave for them. It may be easier for the mother to do things herself, but it is teaching the children selfishness. But this is not all. Are the meals when alone in the family anything like those when a guest is present? In other words, have we company manners which we put on or off at will? The company manners should fit so comfortably that the children would feel so much at ease with them on, that they would never take them off. 'Make the family the company on which to experiment. A rule ought not to be necessary, but the table should not be a meeting place for the discussion of business or domestic troubles. The mind should turn to brighter things than these, if only for a relaxation.

Family life in the home should be a school for good manners, good habits, all working into the character. Kindness and cheerfulness should be the motto of the ideal, attractive home—this home in which seed-babies are to acquire their inheritances to pass on to the future nation and future generations. Nor is it enough to train the children by telling them they must do so and so, walk in this way and not in that, for precept without example always falls flat. Does not the child always copy its father and mother, or the older brother or sister first of all? If you wish to develop kindness and cheerfulness in the children cultivate it first in yourself in your home life.

How often the manners change as the street door closes! Do you know that extract: "The unkind word?"

> "If I had known in the morning, how wearily all the day,
> The words unkind would trouble your mind, I said when I went away,
> I had been more careful, darling, nor given you needless pain;
> But we vex our own with look and tone we might never take back again.
> We have careful hearts for the stranger, and smiles for the sometime guest,
> But oft for our own the bitter tone, though we love our own the best."

The children are always ready to notice and contrast the home life with the spirit shown before the public—yes, and to imitate the different attitudes as well. It is just as essential that a child should grow up in cheerful, kind home surroundings, as it is that sunshine be supplied to plants. Nor should this be all left to the mother. Talk of a sunshiny wife! A sunshiny husband is as much a necessity in the household, as much a factor in successful home life as ever the wife can be. The burden should be borne by both father and

mother together, for only by co-operation can these seed-babies be made into the best men and women. Then as a standard of development take this thought of George McDonald's with you: "Let us try to grow as beautiful as God meant us to be when He first thought of us."

THE PHYSICAL AND MENTAL HARM OF FAULT-FINDING.

By Dr. Annie Backus, Aylmer.

In thinking of humanity and of one another, the astonishing thing is how much more we consider the physical than the mental. If a physician suggests that a patient's thoughts must be directed in a pleasant channel, he is looked upon as a faith cure man. But if he proposes certain exercises for the body, every one sits up and listens. The mind is looked upon as a something quite apart from the frame, and as having no influence upon its condition. To get the liver working is more to be desired than the working of the brain, and to have the stomach right is better than right thinking. But fortunately, or unfortunately, as you may choose to see it, an active life does not exist in the frame with a morbid mind, and the action of the gastric juices of the stomach are largely modified by our train of thought. So long as the mind dwells in the body, it is the influencing factor for its welfare or its harm: and that is why we speak of the "Physical and Mental harm of Fault-finding."

If two persons dwell in a house together, the stronger mind—not body—influences the weaker, and it is our own mental attitude which contributes largely to our physical condition.

Everyone knows how gentleness and quiet treatment add to the physical welfare of our domestic animals—a horse kindly treated will be sleek and fat upon an amount of food, that with less kindness and the same amount of labor would leave him thin and nervous.

Physiology teaches us, and teaches it unmistakably, that the state of the emotions affect the well-being of the body, that the state of mind called fear has deleterious, even poisonous, effects upon the functions and fluids of the body, and that the state of mind called faith, love or charity uplifts, regenerates, and assists the functions. The state of mind known as hate is as a gnawing rodent, eating to the very centre of mental and bodily health: fault-finding is one step on the ladder towards the goal of hate—a subtle, insidious habit, like all habits strengthened by indulgence, until it becomes a most pernicious vice, as it is most common. That it is a vice we know from the ill effects it has upon the fault-finder himself, and also upon all associated with him. It is not like so many other vices, drinking, smoking, profanity, etc., confined principally to the male portion of humanity, but is common to both sexes. We find it usually in the home. The man does not carry it to his place of business—warehouse, office, market-place, or farm. The wife does not take it abroad with her—and strange to say, this habit of fault-finding is most closely related—wives with husbands, husbands with wives, parents with children, children with parents, sisters with brothers, brothers and sisters, and thus is the pleasure and comfort of homes destroyed.

For every condition there must be a cause, and we must search for the cause of the fault-finding habit. Is it a mental or physical weakness? Often both. So closely are the minds and bodies blended that it is scarcely possible to affect the one without the other, and the most common cause of this vice

of fault-finding is overwork, physical exhaustion, labor without pleasure. Sometimes it comes from trying to get more fun out of life than there is in it; over-eating, over-drinking, over self-indulgence of any kind puts the individual in that nervous condition which induces fault-finding with others as an escape from that feeling of unrest within.

The busy housewife rising in the morning, worried with the care of an unrestful child, and knowing that all depends upon her—the breakfast must be put upon the table, the work of the house looked after with its manifold duties, so that every little thing looks like a mountain, and it is so easy to find reason for complaint—the mind becomes unstrung.

The man from his business, after hours of toil, mentally exhausted, reads neglect if his dinner does not please him, or the noise of the children disturbs him, and so arise those jangles and naggings which destroy our health and our happiness.

We do not study ourselves, or our conditions enough or we would understand that the fault-finding is in ourselves, not in others, and before we know it we have acquired the habit of fault-finding. At first, as with all habits, it is only occasionally we give way to it, then more frequently, and after a while there is nothing so perfect that we cannot at once discover and point out impressively many faults; even the setting sun seems to put up a noisy blaze not to our liking.

With man it is usually his surroundings, the meals are not to his liking, the work is not properly executed, there is not enough economy practised by the wife, the children are noisy, everybody does not jump when he speaks, and the whole family is in terror of bringing down upon their heads his ever ready wrath. People will say "Oh, his bark is worse than his bite," and perhaps it is, but none the less he is uncomfortable, and is making all his friends unhappy.

Women differ in their habits of fault-finding. It is usually individuals who suffer from them, nor does anyone escape from their criticisms—the appearance, the dress, the tone of voice, the accent, the manner, are all subjects of unkind comment from the woman fault-finder, and all of us know some one woman whom we dread to meet, because we are sure there will be nothing but fault-finding in her conversation. At home the husband, the children, and even the guests have the unpleasant consciousness that they are watched by critical eyes.

The habitual fault-finder is one whose mental condition has become disturbed, unrest is its characteristic, and unrest of mind brings about unrest of body. The functions are not properly carried out, wrinkles, sallowness, indigestion, are bodily fruits gathered from the fault-finding habit.

A vice of the mind one acquired is even more difficult to break than the physical vices, disturbed mental vision more difficult to correct than disturbed optical vision. A sound mind in a sound body is the acquirement which makes for happiness, and happiness is the possession we are all striving for. From a sound mind issue wholesome thoughts, and thoughts are facts, facts just as far-reaching in their influence as food and clothes, heat and cold, and evil thought is as if we touched a burning coal, it scars, deforms the beauty of the mind. So the vice of fault-finding blemishes the character. A noble thought is as a ray of sunshine, health-giving, beautiful —"For as a man thinketh in his heart, so is he."

Fault-finding and nagging are mental vices dwarfing the intellect, undermining the health, and digging the grave for our fellow creatures. Who can care for a person that is everlastingly finding fault? And what enjoyment can be found in the life of one who is looking only for trouble?

The physical harm of fault-finding is, that a mental state is induced which interferes with the important functions of the body; and the mental harm is, that in giving up to this condition, the mind becomes clouded, weak, unable to act properly, thereby causing judgment to be false, reason feeble and faith lost.

CARE OF THE SENSE ORGANS.

By Mrs. J. V. Watson, Perth.

In treating of the care of the sense organs, one naturally thinks of childhood days, for indeed all good habits, and most bad ones, learned in childhood, are usually remembered to middle life and even old age.

When a baby comes into the world the first attention should be given to the eyes. They must be wiped out with a solution of boracic acid. Twenty per cent. of the cases of blindness comes from omitting this early cleansing. Through babyhood the eyes should receive daily attention. It is a good plan, when washing and dressing a baby in the morning, to have a bowl of boracic acid solution beside you, (a half teaspoonful of boracic acid powder to a half pint of warm boiled water), and in this have some small-sized pieces of soft linen; or, if you have it, some absorbent cotton. If there is a discharge or inflammation in either eye or both, wipe out with a small saturated piece of the cotton or linen, and then throw the piece away. Never use the same piece twice, or on both eyes. It strengthens and soothes the eyes to wash them out each morning with the boracic acid solution anyway, whether, or not, there be a discharge or inflammation. If the child contracts measles—a very grave item is the eyes again. A darkened room is best, and even after the recovery, when in strong light, colored glasses should be worn for a few weeks. Many weak eyes in after life have followed measles. When the child is able to read and observe, near-sightedness may be noticed. If a book or object is brought up close to the eyes, an oculist's aid is necessary. As for the affliction of the eye, commonly called "cross-eye" it is almost criminal to let it pass without attention. How embarrassing in after years for a girl, with an attractive pretty face, to have that "cast" in the eye, and how it spoils an otherwise strong face in the boy or man. All that is required to prevent this is a good surgeon, and a few days of good care. It is one of the simplest operations, being that only of severing one of the optic muscles, and straightening the eye in place. And possibly glasses alone will suffice to correct this in early years.

School-children's eyes must be watched for what occurs sometimes in epidemic form in over-crowded schools, a disease of the eye called "trachoma," which may be known by the heaviness and irritation of the eyelids. Upon examination there will be found gray, granular growths under the upper lids. This condition requires prompt medical treatment, and isolation. Very often these cases are overlooked, and whole schools are infected thereby.

Special care should be taken to keep the nostrils clean in a baby. This enables the child to sleep more comfortably. Again we will find the boracic acid solution coming in good place. Keep on the table little tooth-picks or matches with the sulphur end whittled off, and one end covered with a very small twist or fold of absorbent cotton. Moisten this cotton end in the boracic solution, and then very gently insert it up the nostril, turn it around a few

times, and then draw it out. One will be surprised the amount of mucus which has come away on the cotton. Then remove the soiled cotton, and replace with a clean piece; repeat the cleansing process in the other nostril. *Use no force.* Babies usually twitch when this is being done, so it is best to hold the left hand firmly on the top part of the face, only leaving the nostrils exposed. It is a delicate piece of work to do, but it cannot be injurious in any way. Then every night, the last act before baby is put to bad, take a little vaseline on the tip of the finger, and rub over the bridge of the nose. This will work in, and clear the nostrils, and often prevent those troublesome "snuffles." In some older children the breathing is often noticed to be difficult, making the nights restless, and full of dreams. The child lies with the mouth open when sleeping and snores, and when speaking there is a noticeable nasal tone. Very often deafness is present. The cause of this trouble is called "adenoids." If these are removed early by the doctor, it will save a lot of uneasiness and ill health to growing children. "Adenoids" consist of a fleshy growth back of the nose in the throat, which obstructs the breathing, and which, if not removed, will very often give rise to an inflammation which may spread to the ear tubes, and cause abscesses of the ear, or the deafness previously mentioned. Their removal is too simple a matter to allow them to remain, and retard the development of a child.

As for the ears, deafness noticeable in a young child is very often due to the above-mentioned cause, "adenoids." The ears are not usually troublesome, if good care be taken to keep them clean. When washing the baby in the morning, there is always some moisture left in the ears—after the battle. Take one of your tooth-picks with a dry cotton end, and insert in the ear gently, turn around a few times and draw out, drying the moisture and removing any stray wax. To do this the baby should be laid on one side, and the left hand held firmly on the upper part of the head, and then with thumb and forefinger of left hand, hold up and back the top part of the ear, thus enabling good light and freedom for the right hand to work. When the child has the following diseases, scarlet fever, measles, diphtheria, and even the common mumps, care should be taken against cold and draughts. If there is a persistent discharge from the ear, this should be kept cleaned by irrigation of the ear with boracic acid solution. There is a small rubber ear bulb for this purpose sold by all druggists. If a child complains of ear-ache frequently, something is wrong and requires attention. An abscess may develop, or the hearing may be endangered by neglect.

As part of the toilet in the morning, the baby's tongue should be also cleaned. Take a piece of cotton, or a small square of old linen and wrap firmly around either the fore or little finger, dip in the boracic acid solution, and rub gently over the baby's tongue and around the gums, throwing the piece away each time. This should be done after each nursing, especially after bottle feeding. This will prevent sore-mouth, or thrush, in babies, as it removes the particles of milk which are left from the feeding, and which when left in the mouth ferment and irritate and inflame the delicate mucus membrane. After a few weeks, three times a day is sufficient to cleanse the mouth. Just a word here about the "pacifiers" or "comforts," as they are often called. *Don't use them.* They are unclean. Try to imagine for yourself all the germs that will collect on that "comfort," say, for instance in the course of an ordinary drive, when baby is out for the constitutional. It is usually on a string around the neck, and when not in use is exposed to all the microbes and dust of the streets. Besides, it is impossible to keep these articles clean, and anything short of that should not go into a baby's mouth.

About the throat: as the child grows older, it is a good plan to teach him how to gargle, when he is well. Teach it in a playful way to him. First by depressing the tongue with a spoon, so as to look at the throat, then leading up to rinsing the mouth and gargling. It is sometimes difficult for adults to know how to gargle, and it always very difficult to get sick children to do it. Another good plan is to teach them to swallow little sugar pills, then, if ever it comes the time when they have to take the medicine in pill form (and most medicines can be given in pill or capsule form), it will be done willingly, and it is much less trouble than trying to hide the pill in some sweet but injurious stuff, or dissolving it in water, and making it altogether a distasteful medicine which is never to be forgotten by the child. Above all, do not, if the child be naughty, threaten "the doctor." Children's impressions are lasting, especially of the doctor, and most children dread him, because he is associated with an unpleasant part of their lives, but it is more severely emphasized, if after the illness, the doctor's name is used as a threat.

Last, but not least, are the teeth. When baby is to get his first, or "milk" teeth, he sometimes has a pretty painful time of it. If nursing baby in hot weather, do not wean when teething. Anyway, do not wean during the hot months. Keep the bowels regular, and do not attribute every illness to the "teething" coming. Every physical disarrangement has its natural cause, and that cause should be looked for and treated accordingly. It is soothing to rub the gums frequently, and try giving little sips of cool water often. When the tooth is trying to push its way through the gum, the celluloid teething ring is good to use. Don't keep the ring on a string around the child's neck, but occasionally during the day, rub it gently on the gums. It is such a satisfaction to baby to feel that hard substance on the gnawing gum, and it certainly helps the tooth through. When finished using the ring, rinse thoroughly, and then keep in a covered jar of boracic acid solution. It is then always ready, and always clean. Later on, when it is time for the milk teeth to give place to the second or permanent set, they should be watched. If the coming of a tooth of the second set is interfered with, so that it cannot come in straight, the first tooth should be extracted. Very often the mother can be the dentist, as the milk teeth are not firmly rooted, and can be removed with a strong thread, or with a pair of pincers. The teeth should be attended to in children, as were the mouths and tongues during babyhood. If cavities occur in the first teeth, have temporary fillings put in. As soon as they have teeth enough to brush, the youngsters should be taught the use of the tooth brushes made for children, and, if the cleansing of the teeth is insisted upon in children, there will not be many tooth-aches, or dentists' bills.

PREPARATION FOR EARLY FLOWER CULTURE.

By Mrs. H. Fraser, Fernhill.

There is an experience, common, I believe, to all true garden lovers at the season of the year, when the back of winter has been broken and lengthening days point steadily towards spring. It may be suddenly stirred in one, some day, by the flit of a bird past the window, a drip of water from the roof on a sunny day, or an unusual softness and brightness in the mid-winter sun. More likely, however, it is inspired by the arrival of the first

seed catalogue, gaudy with asters, peonies, or dahlias on the one side, and a wonderful medley of turnips, beets, radishes, melons, celery and tomatoes on the other. However indifferent one has been feeling, the first glimpse of this bewilderment of coloring causes a little throb of lively interest. Life seems half as much again worth living as it did five minutes ago, and visions of summer days and waving grasses drive away the frost on the pane and the howling winds without.

Now, when the inspiration seizes you, is a good time to plan for your next summer's garden. True, the memory of your last year's failures and disappointments may rise up before you armed with the proverbial wet blanket; but never mind that. In gardening, as in all other departments of life, we may make of our mistakes stepping stones to better things, and so there is nothing to prevent us from once more picturing to ourselves the fairest garden in every way, which shall take form and grow and blossom under our hands. To be practical, however, much, very much, toward the actual success of our garden may be done at this time of the year. The subject is one well worthy of forethought, for we cannot afford, in a thing that must last so long, to dash in our flower seeds and sketch out our beds at random. "Hit-or-missness" in a flower garden never yet gave anything like satisfaction, so let us plan, and, still better, see to it, when the proper time comes, that we carry out our plans. Whether our garden shall be small or large, whether it shall be filled with rare and gorgeous flowers, or just bordered with a few of the dear old favorites that have come to be almost a part of us, or whether it shall be a little nook brightened by the gayest flowers of the fields and woods, or sweetened by the "silent places'" own breath of hepatica and fern and delicate bloodroot, must, of course, depend on our circumstances or on our taste.

But there are so many other points to be balanced. What flowers must I plant, in order to have a succession of bloom all summer long? How shall I plant my flowers, so that the colors may not clash? Shall I attempt formal beds and borders, or just put in a few clumps here and there, with a bed or two snuggling away in the cosy corners that I must pass on my way to the well, or in and out at the kitchen door? Shall my garden be mainly for "effect from the road" or shall the best of it be in just that spot which will be most appreciated by the family? These and a score of other questions, will suggest themselves."

One of the first things to consider, in order to have early flowers, is the soil in which you start your seeds. Use one-third mellow garden loam, one-third of rich, dark surface earth from the woods, or rotted sod, and one-third coarse sand, well mixed together. The condition of the soil from the planting of the seeds on through the stages of transplanting is of prime importance. Impoverished or musty soil must be avoided. No matter how good its quality at first, if it has been stored in close, damp and musty quarters, it is unfit for use. Soil that has been exposed, during the summer previous, to the action of rain and sun, and stored in an airy place is what the florist terms "well aired" and is what is required. Add neither natural or artificial fertilizer, for they will rot the seed or burn the tender germ when starting. If the soil be well cured, mellow and moist, it may be finely crumbled in the hand, rendering sifting an easy matter. An ordinary kitchen sieve, not too fine, fully answers the purpose for a small quantity. Amateurs must understand that this careful preparation is a necessity, for if the tiny seeds are embedded in a stiff soil, the germs of most of them will fail to push through.

Such annuals as aster, cobea, pansy, dianthus, verbena and salvia may nearly all be well grown in the windows of a south or an east room as in a greenhouse, with proper attention to temperature. Do not sow the seeds until warm settled weather, about the middle of April, lest a long stretch of cold cloudy weather render the seedlings weak and spindling. Use wooden boxes three inches deep with half-inch holes bored in the bottom. Fill with soil to half an inch from top and press down gently with smooth board, making a nice level surface; upon this sow the seeds evenly and not too thickly. Sift on just enough to cover the seeds, and no more. Press down lightly with a board and sprinkle with an atomizer, "or a hair brush dipped in water, with a coarse comb drawn across answers nearly as well." Keep the temperature at about 60 degrees at night and from 65 to 70 degrees during the day. Nearly every seed will germinate under these conditions, if not allowed to dry out. A single thickness of cheesecloth spread over the surface prevents too rapid drying out or baking of the soil. Spray when needed, without removing this cover, but as soon as the sprouts begin to push through, take the cover off at once. Avoid overwatering, for now is the critical time. Often after the seed leaves appear and before the true leaves form, the plants will begin to damp off—the result of a fungus—and in this event prepare a box of fresh soil and transplant at once, half an inch or an inch apart, according to their habit or growth. In a month they may again be transplanted with greater space. Do not keep in as high a temperature as when germinating, or the plants will become drawn and spindling. Keep low enough to make a forced growth impossible, giving meanwhile plenty of sunshine and air daily, without draughts, that they may grow rugged and stocky. Hardened by this treatment, they will easily bear the final shift into open ground. This must not be made until the weather becomes warm and settled.

Such annuals as candytuft, coreopsis, nasturtiums and poppies are better sown in the open ground where they are to remain. These should be sown rather thickly, so as to afford counter assistance in pushing through the soil. Weak or isolated seeds often fail to penetrate the crust which forms under the action of wind and weather. They may after a time be thinned as required. Do not attempt to sow seeds when the soil is heavy and wet. Plant sweet peas as soon as the ground can be worked. Select ground that has been enriched, choosing a sunny location, and plant with rows running north and south, affording sun on both sides to prevent mildew. A stiff heavy clay loam grows the finest sweet peas imaginable. It is better to spade the ground in the autumn, so that it may be ready at the first opportunity for planting, also for the very important reason that it may be well settled. Take advantage of the very first day that offers, even if it be early in March. If the frost is out of the ground sufficiently deep to get them in, that is all that is necessary, no matter what weather follows. Sow in trench from four to six inches deep; if soil is light and sandy, six inches is best; cover an inch deep and fill in as they grow.

Dahlias for early blooming may be started indoors in boxes of loose sandy soil, kept warm and moist, not wet, and when the sprouts appear the tubers are divided by cutting, leaving two or three sprouts to a piece, and these should be potted and grown until warm sunny weather is assured. Rich soil, sunny position, with plenty of room and moisture is all they ask. Gladiolus may be planted as soon as danger of freezing is past. Plant in deep mellow soil and in clumps of from six to ten, when they may be supported by a single stake driven in the centre, with the help of a little twine. Do not uncover protected roses and shrubs until settled weather. Spade up

beds as soon as weather permits and give a top dressing of old stable manure well dug in. Leave the mulch on the bulb bed until the plants begin to appear, then remove a part only. Tuberous rooted begonias may be started any time now for early blooming.

Hints for May. Pansies may be transplanted to open ground, giving them a location free from afternoon sun. Cut out young plants that cluster around clumps of Golden Glow, and it will make a better showing of flowers. Fertilize hardy perennials, such as peonies, bleeding heart, perennial phlox. Slips from geraniums may be started in March, making nice plants for beds on the lawn. They may be bedded out after the middle of May.

HOUSE PLANTS.

By Miss. L. Duncan, Emery, Ont.

The window garden and the house plants can be made a great source of satisfaction and enjoyment, if they are so handled that the plants at all times seem truly alive. With some, the art of growing and caring for potted plants is natural and instinctive; with others, it is difficult and burdensome. The secret is easy to find. It is the love of flowers and plants in an individual that makes them respond to every touch. Without interest, one cannot hope to succeed in anything. For eminent success, love must be combined with interest. Love and interest having been established, the road to success is straight and sure.

One grows to love flowers the more one works with them. If you want good plants, then start to grow them and work with them. The work will stimulate interest, and the interest will engender love. Florists who have grown old in years, in growing flowers universally say that, the longer they grow them the more they love them. There is an affinity between man and plants—life affinity at least—which has a strong influence on the former. Someone has said that, "caring for plants is like reading high class literature: it constantly keeps before the mind of the worker, universal elements common to all living things—birth, life, struggles, growth, development, change, adversity, success, joy of living, and death." Is it any wonder then that those that have once made a success of growing flowers are never without them afterward? They have found something in life worth having and holding.

One essential in keeping a house plant thrifty and growing is to keep repotting it as fast as it grows larger. The amount of soil in the average flower pot is very small, the roots soon permeate it, and within a few months —in many cases a few weeks—all the available plant food has been exhausted. The roots of a plant absorb plant food from the soil in which they grow. When all within reach has been exhausted, they begin to push out in search of more. Finding only the sides of the insoluble pot, they crowd and mat together in fruitless effort to secure that for which they are seeking. When this pot-bound condition of roots takes place, the plant no longer thrives; it may still live on for a considerable time and even bear blossoms, but it is not growing and producing blossoms commensurate with its ability in a larger and richer soil-home. When a plant becomes pot-bound, which fact may be known by the roots pushing out of the drainage opening, let it rest a few days without watering. Remove it from the old pot. This is easily done by turning the pot on its side and giving it a few taps, when the

plant will come out easily. Get everything ready before commencing to pot. Choose for each plant a size of the pot that will hold the roots nicely and give a trifle of room for them to spread. The florist's rule is to use a pot a size larger than the one the plant had been in previously. Large pots stunt the growth, and the soil is more apt to sour.

A good potting soil is composed of ½ mellow, fibrous loam, ¼ old and thoroughly pulverized manure and ¼ sand. Prepare the pot with charcoal, broken crock or pebbles at the bottom for drainage. Take the plant in one hand, holding it into position in the pot, so that its roots are not tangled, twisted or bunched in a mat together; then with the other hand sift the compost about the roots. Then firm the soil well. Loose planting has killed many freshly potted plants. Water well, and set the pot away in a dark place for five or six days. After this sojourn in the dark, the plant is to be brought into the light, and in another week to the sunshine. Until new leaves appear, newly potted plants should be watered with great moderation. Give water only when the soil begins to look really dry. A plant from which all the soil has been removed is sick for a time, and sunshine and water, the two things a well plant craves, makes this sick plant sicker and sicker. When once over the removal, plants may be watered as freely as ever. Upon a healthy condition of the roots depends the development of that part of the plant which has its life in free air. Sickly plants, like sickly people, are often greatly benefited by a change of location and treatment. Applications of water, warm as the hand can bear, instead of cold water, will often restore a plant to its former vigor and produce an abundance of bloom. If a plant has been forced with too much watering, a period of rest, then repotting and the warm water cure will prove beneficial. When using warm water, always water from the saucer at the bottom, or a trench inside and near the edge of the pot. All plants require frequent cultivation and plenty of fresh air. My experience has been that a few plants well cared for are better than a window full of sickly plants.

There are two things we must know regarding stimulating food for plants—how to prepare it, and on what plants to use it. An excellent fertilizer may be made by filling a keg ⅔ full of caked or lumpy manure that has not had the strength leached out of it. Fill to the top of the receptacle with boiling water, let steep. A blackish liquid results; dilute with water until a light color, and use every week or two on plants that can digest it. Do not use a fertilizer on a tiny plant just beginning life. Do not use it on plants that have ceased to grow for a time and are taking their annual rest. Do not give it to any sickly, half-dead plant. Any plant that is growing well, or that is showing bud or bloom is a proper subject.

Frequently it is dust, above all else, that ails our potted plants. They should be given a chance to live and breathe after the manner of their kind. They require a shower bath frequently, that their pores may be washed out. In watering house plants it is best to give them a soaking and let that suffice until the soil becomes almost throughly dry again. It is not a good plan, generally, to allow flower pots to stand in a dish of water. The function of the dish is to receive the overflow of watering rather than to hold the water for the constant supply. When plants receive all the water that the soil will hold, of course the air being lighter is driven out. But the roots need air, and must have it, or the whole plant suffers. By allowing several days' time between waterings, air can re-enter the soil, and the roots are satisfied. By allowing the pot to stand in a dish of water, capillary action keeps the soil saturated so that no air can enter. There are a few exceptions to this rule. One is the Chinese lily, which has structural devices of its own for supplying its roots with sufficient air for life and growth.

Plants that are kept perfectly clean, not too warm and dry, and with plenty of fresh air and sunshine, are not apt to be troubled with insects. But these conditions in the average dwelling-house are not easily obtained. Constant diligence is necessary to eradicate them when they first appear. Some plants are more subject than others to insects, and the insects are apt to appear on these first, and then spread to the rest; and, if not attended to promptly, will so destroy the foliage and constitution of the plants that they will be almost a complete failure for the whole season. Insects are sometimes brought into the house on some old stunted plant that has been somewhat neglected through the summer season. It may not appear badly infested at first, but, under the conditions prevailing in the house, the insects multiply and spread to the rest of the plants, before the owner is aware of the destruction going on in her window-garden. As soon as you find a plant infested with insects, remove it from the rest and try to clean it. Just as soon as it is free from insects it will start to grow again. Soft-wooded plants of quick growth are more subject to insects than are hard-wooded varieties. Rubbers, palms, and others of like growth belong to the latter, and may be kept clean by frequent washing. Plants that make a soft growth are difficult to wash and clean, as anything like rubbing bruises and destroys the foliage.

The conditions favorable to insect growth are very often the result of neglect in some particular. The plants reach this condition gradually, first dusty, dirty, then filthy, then lousy, and, as a natural consequence, feeble, sickly and delicate. One of the first insects to attack the young growth of many soft-wooded plants in the house is that species commonly known as the "green fly louse." It first appears on the tips of the young growth, and, if allowed to remain, it will very soon spread over the entire plant, causing it to curl its leaves and have a stunted appearance, and in a short time every plant in the window will be more or less affected with it. Insects as a general rule do not appear on healthy vigorous plants. But this will not apply to the green fly. While they are very destructive, they are nevertheless easy to destroy. Florists fumigate their greenhouses two or three times a week regularly, whether green flies appear or not, to prevent them coming and to destroy them after they do appear. The florists burn dampened tobacco stems, in fumigators, and fill each greenhouse with this dense smoke. But this is difficult for an amateur to do successfully, for no matter how careful she be, the smoke will permeate the farthest corner of the house; and again you are almost certain to burn the foliage of the plants you are treating. There are many remedies that can be used to destroy the green fly, but the most effectual and the one attended with the least danger and the most cleanly is to take all plants affected, as soon as you discover the insects, sprinkle them freely over the foliage with water, and stand them in a box close together. The box should be large enough to admit of the plants standing upright when the lid is down. After the plants are placed in the box, dust them freely over the already moistened foliage with tobacco dust. This can be purchased at any good seed-store, done up in convenient sized packages. Then close the lid down, and allow them to stand thus for at least twenty-four hours. By this time the flies will be completely eradicated. When the plants are taken from the box, rinse them with clear water. If your room is very warm you may have to repeat the operation every few weeks. A strong tea made from tobacco stems answers the same purpose, but the odor from it fills the entire house, and is very objectionable, unless when used in the above manner.

A very little red speck of an insect called "red spider" is one of the most destructive pests known to horticulturists. They are very minute and appear

in large numbers, first on the under side of the leaf and then on the whole plant. They will be sure to appear on plants in a dry, hot atmosphere. They weave a web on the under side of the leaves, and are so small that one with limited experience will not notice them until their plants are completely ruined. By careful observation you will be able to detect its presence at a glance. Upon the first sign, remove the plant affected to prevent it spreading to the rest. Turn it on its side in a tub and spray it thoroughly with cold water every day until they are entirely off. Cold water destroys the web, and is an infallible remedy, if persisted in.

A pest known as the scale, an insect that adheres closely to the stems and foliage of many ferns and hard-wooded plants, is very hard to destroy by any but the slow, and tedious process of cleaning them off by hand with a tooth brush. Its back is shell-like, acting as a sort of armour that is proof against the syringe, and it cannot be washed off, no matter how much force of water you have, and any solution strong enough to penetrate the armour of the scale would destroy the plant also. Keep your plants carefully washed and you will not be troubled with the scale. They are sure to come sooner or later on plants that have become pot-bound, or stunted from other causes.

The thrip is a very small insect that attacks many house plants. Its presence is easily detected by its work, which leaves the foliage on which is is feeding in a sort of whitened condition. When you disturb it, it skips and jumps from one leaf to another. Plants without fresh air for a long time, and without being washed or changed about will be very apt to be infected with it. The same treatment as for the green fly will prove effectual.

For tiny white worms in the soil, lime-water is said to be beneficial. Let the soil become decidedly dry. Then flood with lime water. The process may be repeated in a week. The lime-water is made by putting a cup of unslacked lime into two and a half gallons of water. Let it stand twenty-four hours, and use the liquid. The worms are sure to be banished, if the soil is perfectly dry when the lime is applied.

Perhaps we are troubled with stalky plants that seem to be on stilts. Now plants never should be allowed to reach such a tall attenuated stage. Judicious pinching and nipping while a plant is young will make a neat bushy plant out of anything. There is but one remedy for these bean-pole plants. That is to cut back every branch. Leave but a stub, or skeleton of the plant, cutting in the top to one-third its recent height, and pruning the branches near to the stem. The spring is the best time to do this, but it can be done at any season. No, it will not kill the plant. Water but lightly till new growth appears. It will spread out, and a compact, low-headed plant will be your reward.

September is a month in which cuttings root easily. However, I would not advise taking many cuttings, unless one has a proper place for them. Our windows should not be a floral hospital, and, as it takes several months to make shapely specimens out of most plants, it is a mistake to have many small ones for winter use. Plants that have been out in the border should be lifted in September, if desired for the house for the winter, in order that they may be brought to a sheltered place to become accustomed to house atmosphere gradually. If there are plants in the garden that one is desirous of bringnig for the winter, which are not already in pots, great care must be exercised that the roots of these are not disturbed. If the soil around the plant is moistend the earth will cling to the roots.

To have plants blooming throughout the entire winter is but a matter of knowledge—knowledge which will lead to a proper selection. The hardy bulbs are greatly used for pot culture, and with a little care and planning one may have these blooming continually throughout the entire season. Among

the earliest and most easily cultivated are those of the hyacinth and narcissus family. Either of these varieties grow well in water. Fresias are splendidly adapted to winter blooming in the window, and one may have a succession of blooms of these.

Vines should not be neglected for our window garden. Have you ever tried nasturtiums? Seeds may be sown in pots late in the summer, or cuttings may be taken in September from the vines in the garden. These, if given a sunny window, will give a mass of bloom throughout the winter. Then, too, English Ivy is an admirable climber for house decoration. It is surprising how much prettier the ivy looks when spread out on a wall, than when twined round and round in a mass on a small rack, as we sometimes see it. Smilax is always pretty, and there are many other vines that are equally attractive.

Variegated tradescanthia makes a beautiful fringe for flower pots, and the green point vine will grow several feet in length and is desirable for hanging pots. Basket-plants have always been popular with those who grow flowers in the house or conservatory. To-day with all our greenhouses, bay windows, and plant stands, with their plants of high and low degree, the choicest specimen is often some basket plant. It may be a simple pot of oxalis, or perhaps it is the feathery sprays of asparagus sprengeri, or kenilworth ivy or ivy geranium, or nasturtiums, or lily of the valley plant, or something equally as good that gives grace and luxuriance to a window, with bending sprays, careless twists and wide sweeps of recurving foliage. Every flower grower ought to have one or more large specimens of trailing plants, in addition to the ordinary basket sorts. It is these that catch every eye and receive the compliments: it is these that set off a window collection, and make it noteworthy. Think of asparagus sprengeri with strands four or five feet in length, or wandering jew which will grow so long and fill an entire corner. All that is needed to procure such results is strong plants, well fed and kept clean.

In windows that have but little sunshine the plants that succeed best are cyclamen, primulas of all kinds, begonias, and nicotiana. Nicotiana is one of the few plants that will bloom without a single ray of direct sunshine. Abutilons and narcissi will also succeed with very little sunshine. Ferns are better in partial shade. There are many beautiful varieties. The Boston is a graceful variety. The feathery fronds of the ostrich plume are exceedingly beautiful and asparagus plumosus is one of the best foliage plants, since it stands all vicissitudes of temperature, all degrees of sunlight and shade, and all other trials that pot plants must endure. The Japanese fern ball is a splendid addition to a collection. Palms are always graceful.

The best blooming plant, with which I have had experience, is Impatiens Sultana, perhaps better known as patience plant, sometimes called Zanzibar balsam, periwinkle, and disappointment plant. Whatever names it may be given, I feel sure *disappointment* it should not be, for it is a continuous bloomer.

Geraniums and roses require lots of sunlight. Roses are easy to grow if we secure the kinds best adapted to pot culture.

If house arrangements are possible, place potted plants where they will receive light from more than one side. This will make the plant more symmetrical, as plants are inclined to lean toward the light. If this cannot be managed, it is always best to turn them regularly. It adds to the appearance of a house to arrange the plants in different rooms, and not have them all crowded in the window. Change them frequently, and scatter them through all the rooms.

All plants require frequent cultivation and plenty of fresh air. It is love of flowers and intelligence in caring for them that counts. Those who raise a few merely for fashion never have success. Someone has said that our character may be judged by the treatment we give flowers. If we believe this to be true, can we not in future use flowers as a means of building a nobler character?

THE PLANNING OF A FARM HOUSE.

By Miss Helen McMurchie, Harriston.

Most houses are made or marred in the planning. There is no matter which demands more careful and studious attention, yet too often the task of planning a house is perfunctorily performed or left entirely to an architect who cannot, even if he would, plan strictly for the peculiar needs of those who are to dwell in the house. Hence, the many inconvenient and unsuitable houses which we find throughout the country—houses which fail to satisfy, just because they were not planned with reference to the needs of the inmates.

Now, I believe, that a house can be planned satisfactorily only when the plans are made by those who are going to live in the house and hence know the particular requirements which their house must possess. Therefore, I would urge the great importance of all, who hope at some future time to build or remodel a house, giving serious consideration to this matter of planning. Let each bear in mind that the house is to be planned for his peculiar situation and to meet his special needs.

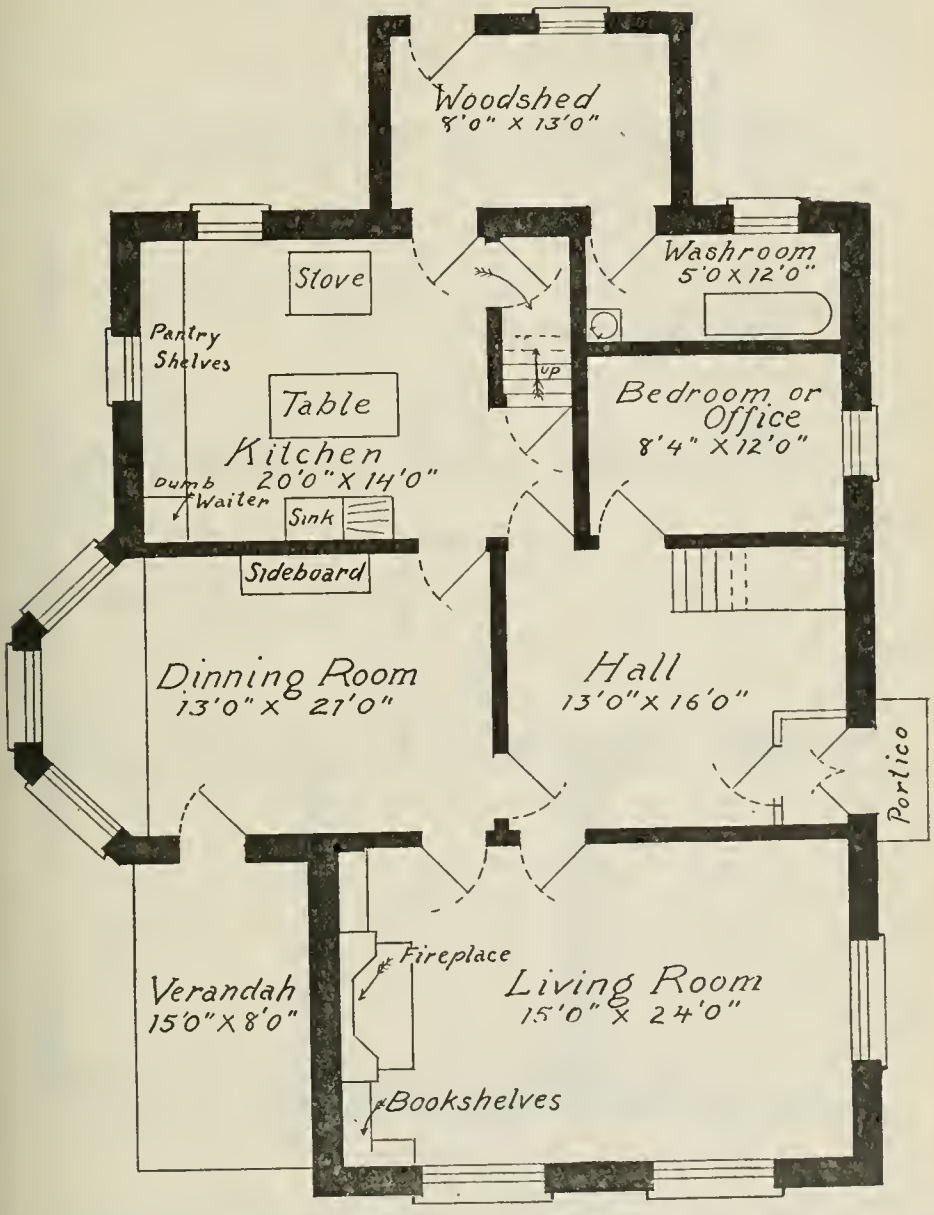
What must we seek in planning a house? Two things. I would suggest (1) Comfort, (2) Convenience—the greatest amount of these to be obtained with the smallest expenditure possible, for most of us, fortunately or otherwise, have to count the cost in this matter.

First, as to Comfort: How many houses are built, not for the comfort of the dwellers in them, but to make a display of wealth or outrival a neighbor's place? Else, why would we find such waste of space rooms, for instance, that are used perhaps once in a year and kept the rest of the time with the blinds down? This, it is true, is seen less frequently than it used to be, but, still, in our houses we have much waste room built to satisfy imaginary wants. Let our guiding principle in this matter be to build what we will use (and then make use of it, by the way) and to build not to astonish our neighbors, but rather to satisfy our own requirements for comfort.

Then, as to Convenience: In nothing can so much labor be saved to the house-wife as in the planning of the house. You will all recall where steps between kitchen and shed, a long distance from kitchen to cellar, steep stairs and other such defects added to the burden of work, already sufficiently great. In just such matters as these a little foresight in planning will do wonders.

But all this is to be done at a moderate cost. The question arises—how are we to build economically? I would answer, first, by using materials which are at hand. If you have plenty of small stones waiting to be cleared from your fields, use them for your house. If, on the other hand, wood is cheaper and more easily obtained, build of it. In so doing we will be building not only economically, but artistically as well, for it is a principle of architecture that that building which most closely conforms in substance and contour to its natural surroundings is most artistic.

In the second place we can economize by eschewing all unnecessary ornament,—all fancy woodwork which only detracts from the general appearance of the house, all jogs and fancy windows. A house with unbroken walls



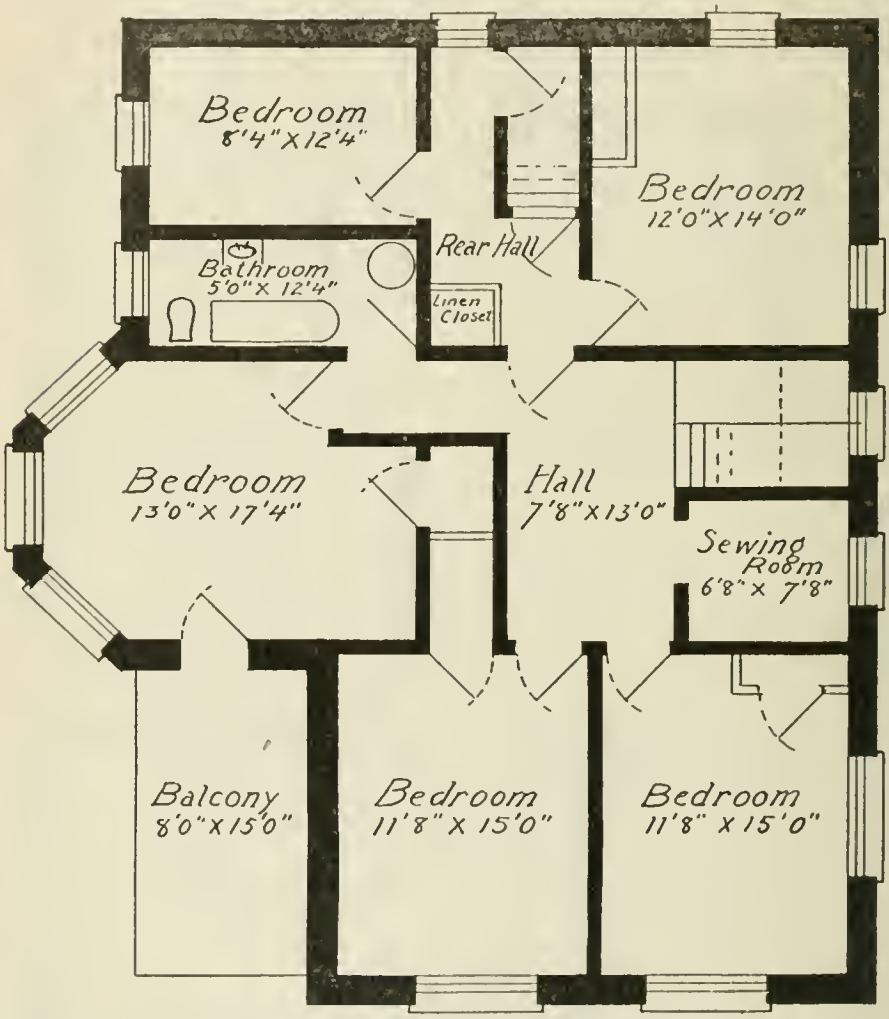
Plan of Ground Floor.

is cheaper to build and heat than a more elaborate form, and a plain cottage with gable roof is much more economic than one with many corners and projections.

The general style of the house should be decided on before the details are planned. The severe dignity of the colonial house harmonizes with our

rural landscapes, but the style chosen will be a matter of individual judgment. Consideration of site and surroundings is a guide in determining the most suitable style.

The site of the house should be carefully chosen. In respect to this I quote from one of the Bulletins of the United States Department of Agriculture. "A well drained, dry soil is absolutely essential, but the question of air drainage should not be lost sight of. All things considered, a gentle

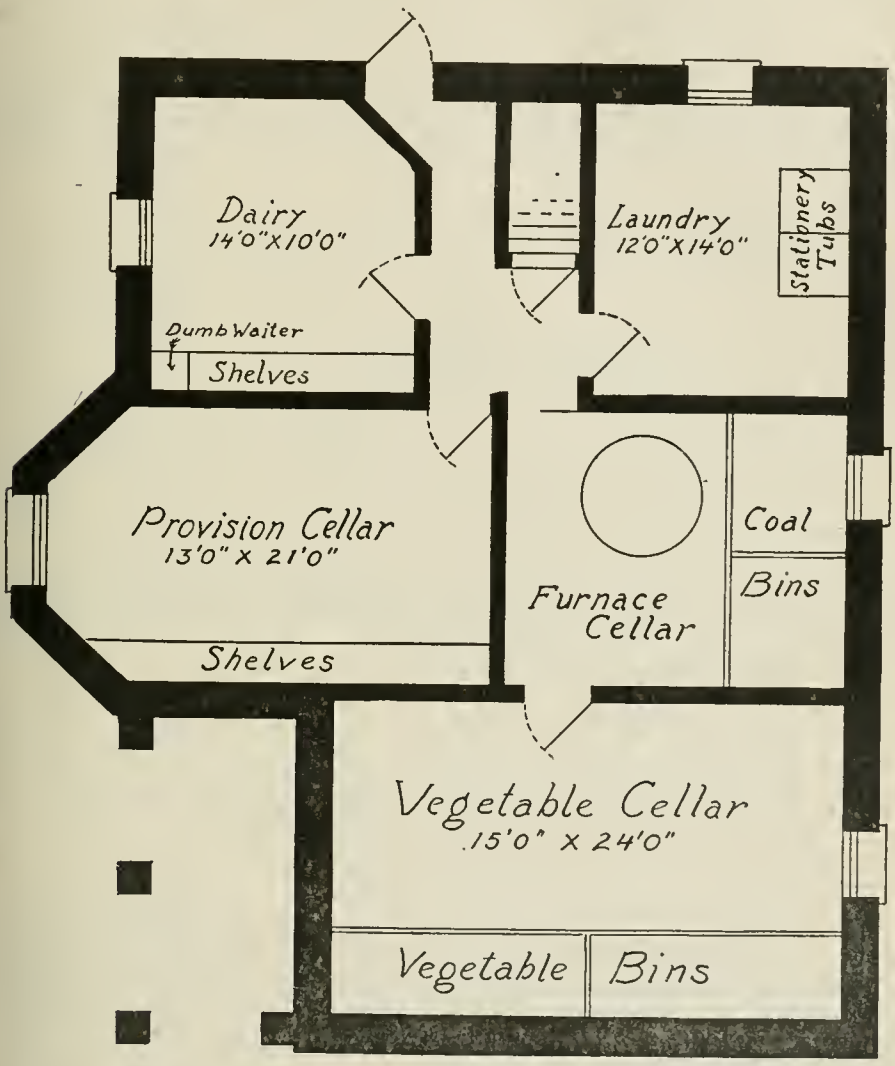


Plan of First Floor.

hillside slope offers the greatest advantages and, if a hillside where the highest land is to the north and west, little more could be desired." A strip of timber to the north and west of the house breaks the cold winds of winter. Proximity to a good well, to the barns, garden and road are all points to be considered.

Now, as to the house itself. The drawings which accompany this article are offered, not as models, but rather that they may suggest how it is possible to secure comfort and convenience in the arrangement of the house. You

will notice that the entrance is at the side from a carriage way which sweeps in from the lane. A projecting portico shades the door. All the rooms downstairs open from the hall. There is no parlor, a room seldom used in many houses, but rather a big comfortable living room which may be made very charming by means of built-in book shelves and a big fire-place. The latter will be most successful when it is built of red brick or of the small



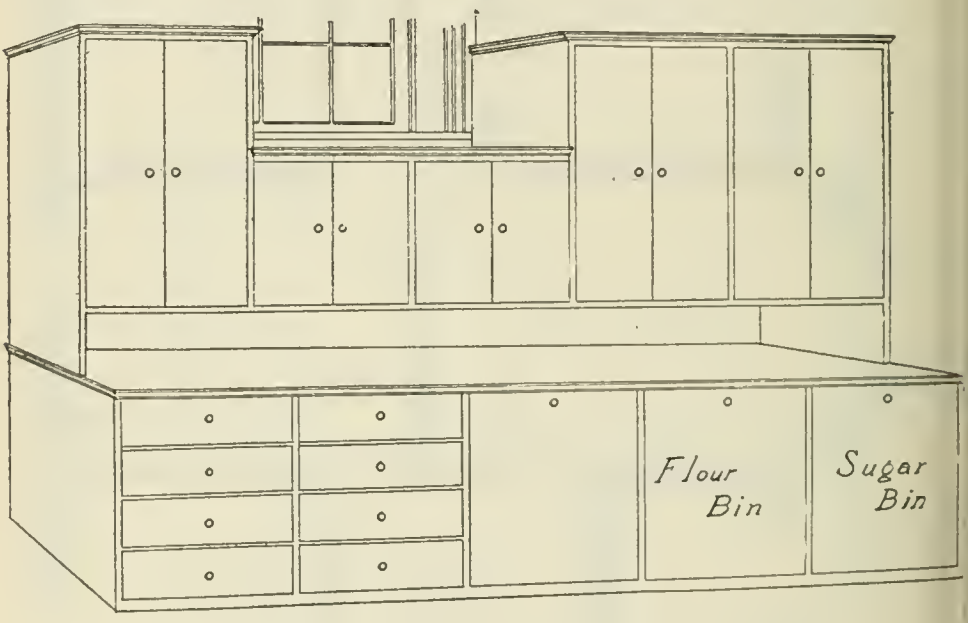
Plan of Cellar.

round stones found in the fields, set in mortar. It should be finished by a plain shelf. Off the dining room a verandah opens. This is sheltered by being built under the roof of the house. In summer this verandah may be used as a dining-room. In the kitchen there is a large cupboard, the upper part consisting of shelves with glass doors, the lower part of drawers, bins and shelves. This takes the place of a pantry. An Institute worker who has tried this arrangement tells me that it is much more convenient than

having a separate pantry. The dumb waiter is indispensable. The sink may have end shelves which can be let up or down at pleasure. The wash-room opening off the shed is intended for the convenience of the men.

The plan of the upstairs needs, I think, little explanation. A sewing room commends itself to the housewife for there she can shut in all the litter of sewing. The balcony is most convenient in times of house-cleaning and also for airing clothes, etc., on all occasions. From the rear hall a stairs leads to the attic which may be finished or simply used as a store room.

Coming to the basement we find the furnace placed as near the centre of the house as possible for economy in heating. Owing to the compact nature of this house it would be necessary to have the furnace and vegetable cellar separated by a heavy wall in order that the latter cellar might not be too warm.

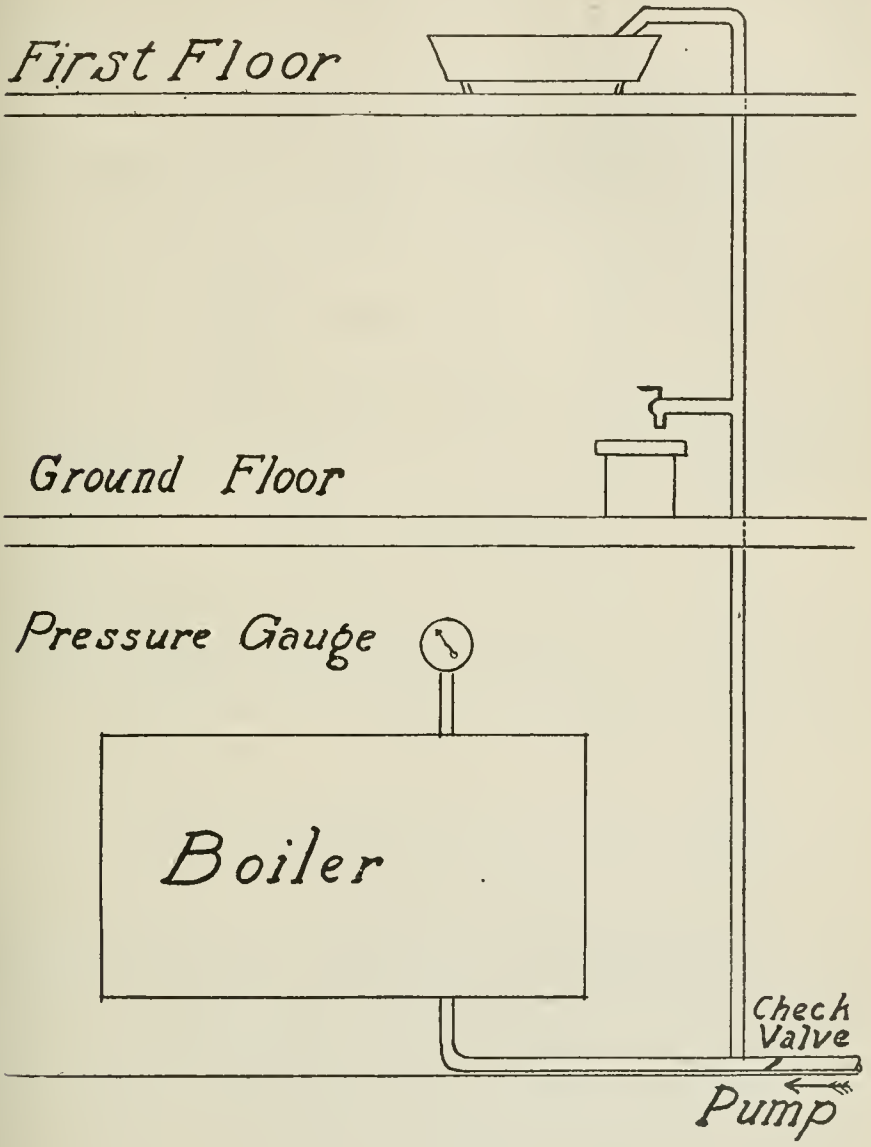


Kitchen Cupboard.

The question of water supply is always a serious one in building a house. The most approved system where water-works are not available is the one illustrated in the diagram. It consists of a strongly built metal tank, placed in the cellar into which the water is forced by engine, windmill or force pump and from which it is distributed to the various parts of the house. I quote from a description of this system.

"The tank has only one opening which occurs in the bottom of the tank. Through this opening the water is forced, and as there is no way of escape for the air it is compressed into the top of the tank. When the tank is one-half full of water the pressure will be at two atmospheres, and will show a pressure on the gauge of 15 lbs. per square inch, a pressure sufficient to raise water thirty feet. When the tank is three-quarters full, the air will be compressed to a pressure of four atmospheres and the gauge will show a pressure of 45 lbs. to the square inch, and will force the water to a height of 90 feet."

"For perfect working of this system, from the above facts it is evident that the tank should be kept from one-half to three-quarters full. However, the tank can be filled fuller or allowed to get much lower than is above mentioned."



System of Water Supply.

"The chart shows a simple system of piping with a tap in the kitchen for the sink and one for the bath on the first floor. A check valve is inserted in the pipe between the pump and the distributing system. This prevents the pressure of the air on the surface of the water from forcing it back against the valves of the pump which often leaks a little."

"This system of distribution can be extended to the hot water system by simply carrying a 'T' from the cold water pipe through a boiler and stove and carrying the pipe to taps in sink and basin."

"The air cushion in the large water storage tank will always provide the necessary expansion to prevent any trouble due to boiling water in the hot water boiler. The storage tank is made of sheet steel and can be of any capacity."

With this system there is no danger of overflow, no trouble with steam in the boiler, no need of strong timbers as in the overhead system and no necessity of insulating from frosts.

The disposal of sewage is another matter which requires careful attention. The septic tank is now regarded as the most effective method. This tank is built below the frost line, being generally constructed of brick. The main sewer pipe from the house enters it near the top. A second pipe "B,"

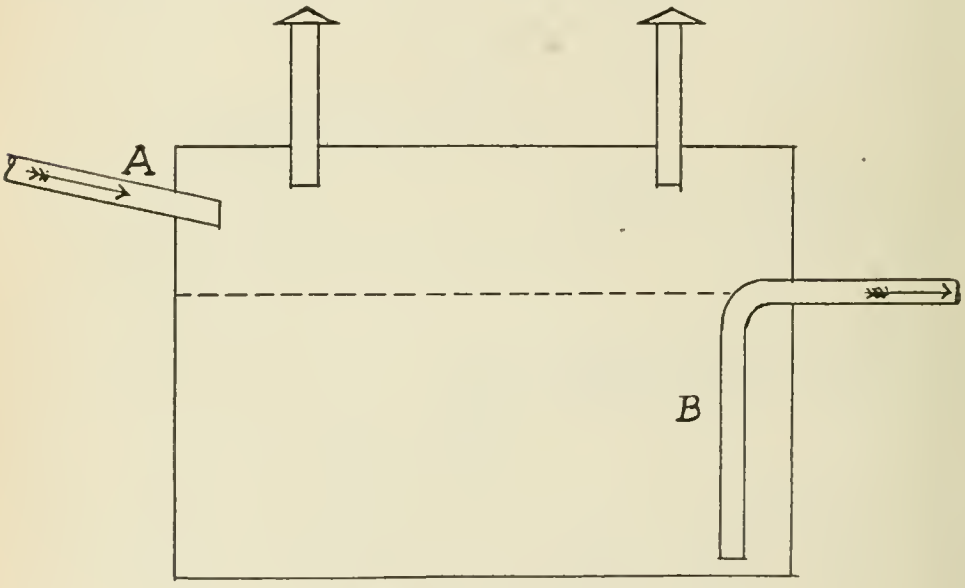


Diagram of Septic Tank.

as shown in the diagram, leads from the tank to a series of drains which branch off in all directions. The liquid that enters the tank is carried off in these, the solid matter is quickly decomposed by the action of bacteria. This system has the great advantage of being simple, inexpensive, and sanitary.

Ventilation should be provided for in building a house. By having plenty of windows which will admit fresh air and sunlight, the house can be kept in a sanitary condition. It is desirable, where possible, to have windows in clothes closets for the purpose of ventilation. A hood over the kitchen range, connected with the stove pipe is an excellent device for carrying off the odors of cooking.

It is impossible to speak of the materials used in the construction and finishing of the house. Suffice it to say that they should be as enduring and substantial as possible and that plain, solid work should be preferred to lighter, more elaborate styles. Hardwood floors stained and waxed are much more sanitary than floors laid with carpets. Wood-work in the natural finish, stained and rubbed, is most easy to keep clean and here, particularly, the plainer the work the better.

It is manifestly impossible in one paper to say all that is to be said on this wide subject. Presumably, many will differ with what has been said, preferring other arrangements for their plans. My answer to this is, make your own plans to suit your own ideas and requirements. This is the great necessity, if we are to have well-planned homes and the one aim of this paper has been, not to lay down dogmatic rules, but to stimulate thought and individual effort in this direction.

HOW WE MAY LESSEN OUR HOUSEHOLD WORK.

By Mrs. A. C. Griffin, Waterdown.

I often wondered when I was a young girl, how it was that so many women, and especially farmers' wives, when they came to middle life and should be in their prime, were miserable, broken down wrecks.

What is the cause and is there any remedy? The cause, I am quit sure, is too much work, too much worry, and not enough recreation. Too many of us have fallen into a rut and go on from year to year as our grandmothers did before us, without one thought as to how we might lighten our labors or improve our condition. Just trying to live up to that old rhyme:

"Man works from sun to sun
But woman's work is never done."

The great question among farmers' wives to-day is, "How may we lighten our household work?" Of course some may say that is quite easy to answer. By buying better kitchen utensils and more of them, or by remodelling our kitchens, to save steps and make them more convenient; but these things may not be practical to some and not even within the means of others at present. But something should be done to extinguish the old epigram quoted above.

Well, how may we lessen our work that we may at least appear to have things done. I don't think it was ever expected or intended that everything should be done in one day. Our husbands do not prepare the soil, nor sow the seed in one day, nor gather in the harvest, nor is it expected of the wife to can all her fruit in one day, for it would not be ripe; nor to finish all the family sewing in one day, as the family are not prepared to wear it.

Now I am not going to set myself up as an example for others, for there are a few of us so efficient that there is no room for improvement. But there are a few ways and means, that are within reach of us all, that may lessen our household work to a great extent. One plan is to have a little better order in our homes, if possible, by having a place for everything and insisting that everything be kept in its place, especially the clothing and personal belongings of individual members of the family. Too often valuable time is lost, and a room put to such disorder that it would require nearly half a day to put things in their place again, searching for some missing article that had been carelessly mislaid.

Another way to lessen our work is to dispense with so many fancy pies and cakes that take so long to prepare and such a short time to devour. These are very nice in their place at parties, weddings, socials and things of that kind, if the girls like to prepare them, but to the average housewife they are not a necessity. Good plain wholesome food, well-cooked, and plenty of it is the demand of the average table. The same may be said of

our sewing. We spend far too much time at the sewing machine, sewing up white stuff into innumerable tucks and frills; then think of the number of changes we have to have of these things and the amount of time that must be spent over the wash tub and ironing board to keep them presentable (and we know that is hard work), when something plainer would take its place and give the wearer much more comfort!

Then we might lessen our labors by a little better system—having a time for doing things and doing things in that time, and we should by all means have a portion of the afternoon to ourselves. I once knew and visited a lady who never had anything to do after her dinner dishes were washed, (which were done as soon as the meal was over), until it was time to get tea, which was to me something out of the ordinary and to be commended. But by all means let us not spend the whole of our lives in the kitchen in a ceaseless rub, scrub and scour. The model kitchen is very nice with its spotless floor and shining stove but I do not believe in being a slave to the kitchen, like one woman I heard of with a spotless stove. She fried the meat with a cover on the pan and then took it down cellar to turn it for fear of getting a few spots on the stove; but, of course, this is one of the extremes. Being particular and economical in small things is to be commended, but if this can only be obtained at the expense of valuable health and strength, and often at the discomfiture of the whole family, better let them go. Better that those around us should remember the head of the home with a smiling countenance and happy face, with time to assist in chores and childish amusements, than as the owner of the blackest of stoves, but with a bent frame, a toil worn face, and too often an irritable disposition.

Another way of lessening our labors that is really both pleasant and profitable in the end, is to take the stitch in time which saves so many nines, to replace the missing button at once, or mend the small rent before it becomes a big hole and makes the garment almost useless or defacing it forever. Some may say that these things are only trifles, but who will deny that trifles make perfection, and that perfection once gained is no trifle? So let us try, by all the ways and means that lie within our power, to get time to brush up our hair, hang up our kitchen apron once in a while and be able sometimes to attend a meeting of the Institute, or call on a neighbor in a social way, so that our husbands may conclude that we at least must be an exception to the rule:

"Man works from sun to sun
But woman's work is never done."

HOW TO KEEP THE HOUSE CLEAN.

By Mrs. Jas. Armstrong, Gorrie.

There is but one way of avoiding the semi-annual house-cleaning, abhorrent to John and a crucifixion of nerve and muscle to his wife. That one way and only way is never to let the house get dirty. This bit of advice was once given by an old maiden lady who had no house of her own to keep and plenty of time in which to criticize the ways of her married friends. You must all admit this is sound principle, and may be applied in more ways than one. For instance, it is easier to keep well if you can than to suffer from illness and to have to pay doctor's fees. Easier to use a blotter

upon a freshly written page, than to erase the ink blotches when you have neglected the precaution. So it should be easier to keep a house decently clean and neat, than to have a periodical, general, rousing, ridding up of rubbish that has perhaps been accumulating for six months, greatly marring the comfort and endangering the health of the whole household.

I am well aware that no matter how careful, clean and particular a housewife may be, a certain amount of so-called house-cleaning must be done both spring and fall; but I often think there is something radically wrong in our present system of house-keeping to require such a general upheaval and overturning of everything, big and small, in our homes. As long as there is a human race and homes, there will be a necessity for a certain amount of spring and fall cleaning. There will be new and novel ways and who knows how easy it will be to keep house in the next century. But our duty is to take thought for the present time and present duties, and, if we can improve in any way in keeping our houses clean and save in even ever such a small way in this seemingly necessary spring and fall so-called house-cleaning, we should do so.

No wonder our women stand appalled before the multitude of worries house-cleaning involves and feel almost helpless to overcome them. Constant cleanliness everyday and good housekeeping, with that eternal vigilance, which is said to be the price of liberty, will help us, one would think, from many a pest. Too often you will come across house-keepers who have no system in doing their work from day to day. They often make work for themselves and then they get discouraged, instead of keeping house properly and being tidy as they go along. How often they will say in the morning, "There is so much for me to do to-day that I scarcely know where to begin or what to do first," whereupon she delivers herself up to the influence of flurry and discouragement, works very hard and accomplishes nothing, being tired before she starts and very likely loses her temper into the bargain.

Hurry scurry modes of work are profitless, taking a hundred steps sometimes where half a dozen would be sufficient, simply wasting time and energy. Now, to keep our house clean and tidy we must have system. Those who appraise domestic attainments high enough to give them serious thought understand how greatly the principles of order and cleanliness will facilitate the working of the domestic machinery. Precept without practice in this matter is only as a blunt tool in an untrained hand. Every woman knows that house-keeping, even on a small scale, necessitates an intimate acquaintance with facts as well as figures, with the laws of supply and demand, with market and field, as well as the principles of sanitation. How are even those who think themselves proficient in such knowledge to apply it, unless there is some sort of method to guide their work.

Half the people in this life make failures of their careers because they do not cultivate the habit of doing things carefully and knowing exactly what they want to do. If we would do our work in the best way, we must put thought into it. There are those who despise method, considering it synonymous with dullness and regard disorder as a sign of genius. "Oh! I hate those dreadfully methodical people who do everything by rule and cannot budge an inch from the beaten track," cried a brisk excitable creature, who was wearing out her life in trying to overtake a confused medley of duties. Fretting over work, simply from lack of system, kills more people than any amount of actual labor. Many are more fatigued from what they fail to accomplish than by what they really do, that is they worry over a thousand and one things which need their attention, dash at their tasks with impetuosity, rush and hurry in a breathless scamper, busy themselves about one thing while thinking of another. Women are often accused of

ill-temper and lose the influence their genuine goodness should exert, because their nerves are suffering from this sort of strain. Yet only a woman can tell how much prayer and grace and patience it requires to hold worry at bay.

Sometimes we think it is a trouble to clear out closets, shake and brush and air their contents, oftener than the yearly or semi-yearly "cleaning," and it does take time to shake, brush and air our garments every time before we put them away, yet those trifles neglected are one cause of the big "yearly cleaning." Once a week at least our sinks should be scoured with hot suds or ammonia, or washing soda dissolved in boiling water. The cellar should be inspected regularly, not left for the general spring or fall cleaning. Old articles of clothing, etc., piled away in closets often breed germs of disease and should be disposed of. We should often air rooms, bedding and clothing for they gather dust, especially in winter when doors and windows are kept closed. Dust begets disease by harboring evil germs. The fight with dust must be incessant and, if we cannot be actually clean, let us be as clean as we can. The price of cleanliness is eternal vigilance.

JELLY MAKING.

By Miss Gertrude Carter, Guelph.

It was rather surprising for me to find that jelly is not made generally. It is a tasty kind of preserves, but the fact that it is not made more frequently is probably due to the fact that housekeepers suppose it rather difficult to make. Miss Alcott in "Little Women," has made the childish heart beat in sympathy for poor Meg and her troubles with the jelly which refused to jell.

Jelly is made of cooked fruit juice and sugar, usually in the proportion of one pound of sugar to one pint of fruit juice. Many of the jelly fruits may, however, be made with less sugar, some being made with as little as one-half pound of sugar to one pint of juice. The acid fruits require more sugar, so we use the sugar to suit the fruit. Sugar tends to destroy the flavor of the fruit, so the less sugar used the better the flavor of the jelly.

The object in making jelly is to preserve the original flavor of the fruit as far as possible; to have the juice well jellied, but not too thick, leathery or tough; and also to have a good clear color. Jelly differs from canned fruit in that the juice alone is used; while in canning, we use the pulp as well as the juice. The majority of the fruits contain a jellying substance, so, if the juice were boiled down sufficiently, it would jell without the aid of sugar. This would be rather expensive, however, for we should have a very small quantity of jelly from a basket of fruit. The sugar assists in the jellying process.

The preparation of the fruit is the first step. All fruit should be carefully washed. Grapes should be removed from stems. Apples should be cut in pieces, but not cored, unless wormy. The core of the apple contains a lot of jellying properties and the seeds impart a delicious almond flavor. In making quince jelly it is well to remove the cores, as some varieties give a stringy jelly, if the cores are left in. Do not pare the fruit with skins, because there is much good material coming from the skins.

We now have our fruit prepared for cooking. We require the juice only, so, if it is possible, as in grapes, we cook the fruit until soft without any water at all. Apples must have sufficient water to cover them. Use as

little water as possible. We also use as little heat as possible. So if much water is added, it will require longer boiling and thus more heat. Heat tends to destroy the flavor of fruit. Do not stir except enough to keep from burning. Some fruits, such as red currants, may be mashed while raw with a potato masher. Do not let juice for jelly stand over night, as it loses some of its true color and flavor by being exposed to the air so long.

The extraction of the juice follows. We now have the juice and the fruit pulp together. The juice we require; the pulp we do not; so we proceed to discard the pulp and save the juice. This is done by pouring into a jelly bag and allowing the juice to drain out, in a place free from dust. A jelly bag rarely drips much longer than an hour, and it is much better to make the jelly up quickly. It is usually suposed that a flannel jelly bag is best, but good results are obtained from a bag made of two plies of cheese cloth. The latter is more easily cleaned and does not thicken up like the flannel bag. A pointed bag is the best, for the juice drains out at the point only. Spread papers over the floor as a protection, for grape juice, especially, stains the floor badly. The juice may be caught in a granite pot; do not use tinware.

It is usually best to boil down the juice before adding the sugar, for from seven to twenty minutes, according to the quantity of juice. Measure the juice before boiling down and weigh out the sugar, using, as a usual thing, from three-quarters to one pound sugar to one pint of juice. Heat the sugar in the oven, but do not let it turn brown. When the juice has boiled down sufficiently, add the heated sugar to the juice and allow both to boil together for from three to five minutes. Test on a cold plate to see if it jells. If not boiled down enough before adding sugar, it may be necessary to boil longer than the five minutes. If boiled too long after sugar is added, the jelly becomes tough and leathery.

Put the jelly in sterilized jelly glasses, and allow it to stand uncovered over night. If sealed at once, steam would be shut in, which would tend to prevent jellying. If it does not jell as well as one would wish try placing the jars in the sunlight for a time. When cooled cover with paraffine.

Many delicious combinations may be made. We may have pure grape jelly, or we may combine apple, cranberry or crab-apple juice with the grape juice. Pineapple and apple juice (½ cup pineapple to 1 cup apple juice) combine very nicely. Cranberries and snow apples also combine well, while the juice of the snow apple alone makes an excellent jelly. The quince is a good jelly fruit, and either alone or in combination with other fruit juices, makes a good jelly.

CANNING FRUITS AND VEGETABLES.

By Mr. J. A. Morton.

You are all doubtless familiar with the operation of canning and know its details far better than I can tell; therefore an attempt on my part to instruct you concerning the practical side of the question savors of presumption. But possibly, some of you may never have considered or perchance you have forgotten the "Why" of the matter, the "Why" (if success is to be obtained) certain steps in the process must be done in certain definite ways, and it is this phase of the question which I wish to emphasize, in the hope that my remarks may assist you to a more thorough understanding of "Why" these acts are always done in these particular ways.

The old system of education by which we added to our store of knowledge through memory alone, by getting a thing off by rote or learning by simple imitation, has given place to the more rational method of inductive teaching. In any branch of knowledge, essential principles rather than disconnected incidents are what are now taught, the elaboration or practical working out of the details of the subject being left to the individual himself.

We are all more or less experimentalists, generally looking for a better, easier, more rapid way of doing things and this is to be commended. Experiment is the main force in successful progress, and an appreciation of why certain processes produce certain specific results, is a necessary accompaniment of intelligent experiment.

The woman who makes good bread, just as her mother did before her, but knows no better reason for the various operations of successful breadmaking, than that her mother had always done it that way, adds nothing to the sum total of the world's intelligence in the science of breadmaking. A failure, if one knows why it was a failure, is of more utility in the acquisition of knowledge than an unbroken series of successes, without an intelligent understanding of why they have been successes.

To keep perishable foods in the fresh natural condition produced by nature, and as perfect as possible in form, appearance and flavor has been the aim of people for many ages. Many different ingredients and combinations of substances have been tried for this purpose. I shall not now discuss the efficiency of such preservatives, but simply say that they are all more or less injurious to the human system, incorporated as they must be by the food they aim to preserve. Besides the fact that many of these act directly in an injurious manner upon our digestive faculties, it should not be forgotten that the same preservative which is used to prevent fermentation in the canned goods, will, if taken into the stomach, hinder and obstruct the process of digestion, which is simply the operation of other ferments.

The application and employment of heat is a most effective preservative, and the best one, consistent with safety to the user of the food.

One great law of nature is, that no sooner does any living thing, animal or vegetable, attain the zenith of its existence than it immediately begins to go down hill to decay. This inexorable law of nature is not agreeable to contemplate, but it surely exists.

Providence has provided certain agents whose part in the general economy of nature is an important one, namely, the reduction of organic matter into the soluble mineral substances from which it was originally built, and which, returning again to the soil, serve afresh for the nourishment of a new generation of vegetable life. In this way the surface of the earth is cleared of dead bodies and fecal matter, the dead and useless substances which are the refuse of life. These scavengers of nature are very small, so small that many of them are invisible to the unaided vision, but they are none the less very active agents in the process of decay—too willing helpers in the process of disintegration. Floating in myriads in the air we breathe, carried hither and thither by the passing breeze are the spores or seeds of these microbes, anxiously seeking what they may devour. They are present everywhere; in the water we drink, upon every leaf, branch and fruit, and every clot of earth. Yes, even our clothing and persons are the involuntary carriers of these miscroscopic foes of mature fruit, and other foods, and woe betide the ripe fruit whose ruptured skin affords an entrance to the eager foe. To baffle and circumvent these microbes is the result aimed at in the canning of foods. The enemies we seek to overcome by this process may be classed generally as ferments and moulds. One common

ferment attacks the sugar syrup converting it into alcohol, with the giving off of carbonic acid gas. Ferments are yeasts that grow by the simple divison of a single cell; it increases in size, then divides itself into two cells, these increase in size, divide and so the process of growth goes on. All this time the operation of changing the sugar in the food to alcohol has been going on. You are all familiar with the appearance of mould. A mould plant is a very small thing, but when several hundreds are aggregated they become visible, appearing as patches of a sombre green. Spreading over and eventually into the substance of the article attacked, is the body of the mould plants, very fine, thread-like substances called the mycelium, while extending upwards from it may be observed a fuzzy substance, which on examination with a powerful glass will be found to consist of very many fine stems, each surmounted by an enlarged head bearing many small, rounded grains or spores. The multitude of these fine stems gives the mould its fuzzy appearance. These spores are the seed of the plant, and are usually known by the name of resting-spores. These resting spores are much more difficult to kill and deprive of vitality that the parent plant, being capable of enduring much greater heat, and for a longer time. Freezing will not kill them, drying will not do it either; this latter simply makes them so much the lighter and thereby the more diffusible. So minute are these resting-spores that it takes from 5,000 to 25,000, according to the species, to measure an inch, but they are very energetic and accept every chance they get to obtain their object in life, developing into vegetative organisms when the conditions of moisture, temperature and food supply again become sufficiently favorable. As I have already intimated, the vegetable organisms, as distinguished from their spores, cannot survive the prolonged action of heat, a comparatively low temperature, 150 degrees or less, being usually sufficient to kill them; whilst the spores on the other hand, can withstand the action of a temperature anything short of the boiling point of water for a considerable length of time.

Have you had this experience? You had put up your fruit very carefully as you thought, but on going subsequently to the cellar to examine your collection of fruit, you find to your annoyance that, notwithstanding all the care bestowed, mould has appeared on the top of the contents of one or more jars. The jars are apparently hermetically sealed; the top is just as solidly on these as upon the other jars and it takes just as much exertion to remove the glass top. You say, "I don't see how that can be; it is air tight, and I don't believe that mould ever worked its way in there." You are right, it did not work in. Then how does it come to be there? There were resting-spores inside the jar which have not been killed by the heat applied. It may be that you had used fruit so over-ripe that mould plants had a chance to grow thereon and ripen their spores, which it does not take them long to do; it may be that you had used jars which, in the hurry of the season before, had not been carefully cleansed on their being emptied of the former contents, or, what is a more common case, you may have used jars which contained mouldy contents without a most thorough cleansing of the jars and which therefore contained a plentiful supply of resting-spores.

I hope I have made plain to you about these two forms in the life history of the ferment and mould plants, as you will then know what is to be combatted in canning foods, and you all know that a perfect understanding of what the difficulty is, goes a long way toward the remedying of that difficulty.

See that the jars are perfectly clean, thoroughly scalded with boiling water, filled to the top and left in them for a considerable time; boil your rubbers and covers, see that the rubbers are soft, not in the least hard, and

are free from grooves or cracks. The best rubbers only cost about a cent apiece, and it is poor policy, for the sake of a cent's expenditure, to run the risk of spoiling a jar of good food worth at least 50 cents. Examine the rim or part of the glass top which rests on the rubber to see that it is sound; the edge of a knife or your finger nail run over this rim will detect any flaw probably easier than any other way. Small bubble checks are often found on the edge of this rim, of sufficient depth to prevent closing the jar tight. Use no jar with metal lid or top. Porcelain lined metal tops are dangerous; the contents of the jar should never be allowed to come in contact with the metal. See that you pay particular attention to and specially clean, jars which formerly contained mouldy fruit or which had been put away imperfectly cleaned. With them the great danger lies.

Another important point is the use of only sound fruit. It is false economy, because you can obtain it cheaper, to put up over-ripe food; such is very apt to ferment and requires a great deal of care in the sterilization. I admire the principle of the French, who want the best of everything and who will forego the use of a cheaper, inferior article of food for the satisfaction of enjoying at much longer intervals, choicer pieces of that kind of food. And what is not too good for a Frenchman should not be too good for a Canadian. The best in the land for the best in the world, (and that is what we are) should be our motto.

A question which suggests itself right here is this: Should sugar be used or not? A great many people still cling to the old idea that fruit cannot be kept without the addition of sugar in the process of canning. This is entirely and surely a mistake. Sugar, as ordinarily employed, takes no part in the preservation of the fruit from deterioration. If made into a thick syrup, it acts as an antiseptic, keeping perfectly sound fruit from decay even without heat.

Personally, I like fruit put up without any sugar in the jars, the sweetening being added when the jar is opened to be used. In the first place the addition of sugar and subsequent heating interfere with the delicate flavor of some fruits and give others a distinctly different taste, and in the next place, it is not an economical way of employing the sugar. Our ordinary white granulated sugar is a pure cane sugar, and is the sweetest of the sugars, for there are more kinds than one of sugar. Some are crystalizable, others are not. Now note this, when cane sugar is heated in the presence of an acid it gradually changes into other forms of sugar possessing much less sweetening power. One form, glucose, has only about 30 per cent. of the sweetening power of pure cane sugar. All fruits contain more or less acid, without it they would be very insipid. Any observant housekeeper knows that it takes more sugar to sweeten a given weight of rhubarb when added before cooking than when added after the cooling of the cooked rhubarb, also that when sugar has been added before cooking, the longer it is cooked the less sweet the mixture becomes. Why is this? Simply because the acid of the pie plant has converted a considerable portion of the cane sugar into inverted sugar which is much less sweet. The only objection heard, which appears to be worth considering against the putting up of fruit without sugar, is that in the case of thick-fleshed fruits, such as peaches, pears, plums and the like, to add the sugar either in the solid form or as thick as syrup when you go to use the fruit, does not give an opportunity for the sweetening property to penetrate these thick fleshed fruits. This is an objection worth considering, and it is left with you to act as you please, only remember that sugar, when cooked with the fruit in the jars, is changed into a much less sweet form of sugar, and it also affects the natural flavor of the fruit.

There are two methods of filling the jars, in general use among housekeepers. One is to fill the jars with the cold uncooked food and cook it in the jars, the other is to cook the food first, fill and seal the jars. One method will suit some; others will prefer the other. Either way is good and I do not pretend to recommend either as being better than the other; whichever suits you the better, adopt it. A lady friend asked me how I ever came to know so much about canning. It is simply the outgrowth of my study of botany. These microbes are minute plants, and the investigation of their life history naturally brought to me a knowledge of them from an economic point of view how they could be used, and how they could be curbed and controlled.

With regard to the practical part of the subject, I do not know what I can do better than describe, as best I can, how it is done by the lady who superintends the canning industry in our home.

All fruit and vegetables are put into the clean jars, cold and uncooked; when sugar is to be added it is in the form of syrup; the jars are filled nearly to the top, not too full, as the contents swelling with the heat, there is danger of small portions of the canned goods getting between the cover and the rubber, preventing the lid being fastened down air-tight and the jars must not be too empty, lest the oxygen in the air within the jar give any resting-spores which may not have been killed by the heat, opportunity to germinate and mould might result. Sound, selected rubbers are adjusted in their places, the tops put on, partly fastened or screwed down, but not perfectly tight to admit of expansion of the contents of the jar. The filled jars are cooked in the wash-boiler which ordinarily will hold 13 to 15 quart jars or 15 to 18 pints. We use a false bottom in the boiler made of wooden slats. The boiler being put on the stove with the jars standing upright on this bottom, cold water is poured into it until two-thirds of the way up the jars, the cover is put on the boiler, and the water therein brought to the boiling point. How long it should be kept there depends on the kind of food being canned. Keep it boiling long enough so that when the jar is opened the food will be palatable, without further cooking. Strawberries, raspberries, blackberries and huckleberries will do if removed when the boiling point is reached. Take the jars out of the boiler, fasten down at once. If, while cooking, you find that the air is getting into the jar, which you will be able to detect easily by bubbles forming on the inside of the jar, it is caused probably by a poor rubber or a defective top: replace it by a good one, of which you should have two or three ready to use, and put back the jar in the boiler for a few minutes longer.

Larger fruits, such as peaches, pears, plums, cherries and the like, should get 20 or 30 minutes boiling after the point is reached, the time depending on the firmness of the fruit. A hard peach requires longer than a mellow one. Pineapples should never be put up with sugar, they do not keep well that way. Grated with a Gilmore grater, packed in solid without any sugar, and treated as indicated for strawberries, it should keep forever if it gets the chance. Try some this way, and you will find it does not get the chance to keep long.

Tomatoes are easily canned. Scald, peel, cut in half, remove the hard core, pack in jars as solid as possible without the addition of an extra fluid, and a teaspoonful of salt in the mouth of each quart jar, adjust rubbers and covers, place the filled jars in the boiler and give them five minutes after the boiling point is reached.

Certain vegetables are very nice put up this way. Beets, care for them as you please, when stored in the cellar for winter use, soon becomes woody. By canning half-grown beets, you may have a supply of most deliciously

tender vegetables all the year round. Wash young beets, put them into boiling water, cooking them only long enough to loosen the skins; slip these off; pack the beets, either whole or divided as desired, into the jars and fill up the jars with a mixture of vinegar and water in the proportion of one part vinegar to four of water, cover the jars as before described, and give them three-quarters of an hour after the boiling point is reached. The principal object in adding the vinegar is to preserve the fine red color of the beets, as without it you never can tell what will be the color of the finished article, red, brown, cream, black, grey or dirty purple.

Young turnips and carrots may also be canned. Peel them, boil them first in water for 15 minutes; pack in jars and give turnips half an hour after boiling point is reached; carrots should have an hour. Canning peas is not recommended: we never made a success of them, and the delicate flavor of the pea is lost in the cooking. If, however, you want to try them, three hours boiling is the time laid down as proper to ensure success.

To can corn, we boil it in a pot about five minutes to simply set the milk, then cut it off the cob, pack solidly in jars without any water and proceed in the way already described for other food, but boil for four hours. The great quantity of sugar and starch in corn and peas renders them especially liable to ferment, hence the long time of boiling in their case. Some people do not boil their corn first, but cut it off the cob, pack it raw, solidly in the jars and boil the jars in the usual way. If you want an extra nice article in canned corn, after the preliminary boiling split down with a sharp knife each row of the corn lengthwise and with the back of the knife press or scrape out the kernel, pack this into jars and can as before directed. You thus get nothing but solid pulp.

Green or string beans are cut into pieces, packed in jars, these filled with cold water, a little salt added and treated as before described, giving them one and a half hours.

Asparagus requires exactly the same treatment.

In boiling the filled jars; always begin with cold water in the boiler; the object is to bring the whole gradually to the boiling point, so that the contents of the jar is thoroughly heated through.

If you want to can only one or two jars at a time, use a tall tin pail with a slat bottom, instead of a boiler. You will find it convenient.

Be sure that the vessel in which you boil your filled jars is closely covered, so that the top part of the jars is as well heated as the lower part.

MILK—ITS CARE AND FOOD VALUE.

By Mrs. J. F. Imeson, Perth.

In treating this subject, I do not pretend to give any instructions on the care of milk to the country ladies who are here present, who all, I am sure, understand the care of milk as well as I do. I think the women of the county of Lanark may be justly proud of the reputation our county has for the high grade of cheese, that is shipped every week from the Perth station for more than half the year. I am told it is second to none produced in Canada.

There is one thing that we can never know too much about—thorough cleanliness from start to finish in handling milk.

We women may not do much of the milking, but we usually have this work under our supervision. We can at least insist that the stables are kept

in a clean and sanitary condition and properly ventilated; that the milkers wash their hands before milking and otherwise observe cleanly methods. Also that the milk is cooled as soon as possible after milking. With the cow clean at milking time, the stable clean, the milker clean and clean pails, strainers and other utensils and proper cooling there will not be much trouble with milk. Is it not well that a food product of such value and widespread use can be maintained by the observance of two simple rules? First, cleanliness. Second, keeping at a low temperature.

I have been reading all I could find on this subject since I knew I had to write this paper, and I have been surprised how much importance has been attached to cleanliness, experts claiming that one can of impure milk sent to a factory would spoil a whole batch of cheese or butter, and I think every neighborhood has some patrons who are neglectful in this matter, but how to reach them is the question?

I read of one doctor in Toronto who, four or five years ago, traced an outbreak of typhoid fever to the milk delivered by a certain man. It was traced to the water of the well used in washing the milk vessels. The next year the same thing occurred, and the man was put out of the milk business. Many other instances of the same kind were given, which goes to show how necessary it is that we should have a thorough knowledge of the proper care of milk. I may here say that I read the report of the Provincial Milk Inspector, who took samples from the three milk delivery wagons in Perth. They were tested in Ottawa and the report was very satisfactory, so the Perth people may be congratulated on getting a supply of good milk from any of these men.

It is milk as a food that I am going to talk about to-day. Milk is a product which we are handling daily, and using continuously. There is not a meal in the average family that, either in the raw material or as butter or cheese, does not depend upon milk to furnish a part of the general variety used. Nothing seems so equally wholesome to both old and young as the product of the cow. Therefore there is no more vital question to the people of both town and country than a better understanding of the properties of milk. In order to understand the food value of milk, we must have a definite knowledge of the composition of the body, and the classes of foods necessary to support life. Briefly, we require to continually replace in the body, muscle and tissue, fat, mineral matter, heat and energy, and water. For each different substance in the body we have corresponding food material. To build up muscle and tissue, we use proteids, meat for example. For our fat, we eat butter and cream. We get mineral matter in small quantities in all our ordinary foods. Heat and energy are supplied by our starches and sugars in any form. Water we find in all foods. Should any food contain the proper proportions of all five classes, we call it a perfect food. No true food contains any other thing than one or more of these elements. And we should make our eating not merely a matter of hunger and taste, but we should bring our knowledge to bear upon it, and make it a matter of thought and science. Milk contains the five different elements necessary to support life. If we allow milk to stand for some time, we can skim off the cream which is the fat. Then add a little rennet and the milk curdles and forms curds and whey. The curd is the muscle and tissue building portein. The whey is composed of water and a little mineral matter. The mineral matter foods, such as salt, sulphur, and iron build up hair, nails, etc., and some aid in keeping the blood pure. The heat and energy part we get in the sugar of milk.

In composition 100 lbs. of average milk contains 87 lbs. of water, 4 lbs. of fat, 5 lbs. of milk sugar, 3.3 lbs. of protein, and 0.7 lbs. of mineral mat-

ter. In regard to its nutritive value, milk stands very high, and its worth is not appreciated as it should be, especially when we compare its cost with its value as a food.

While milk is a perfect food in itself, for an adult the different materials are not in proper proportions to continuously nourish the body alone and so require to be used with other foods to make a balanced ration. A lunch of milk alone would nourish the body a good deal, but a lunch of about ten ounces of bread and a pint of milk, would be both nourishing and satisfying and, I have read, would equal in nutritive value a lunch of soup, meat, potatoes, bread and butter and coffee. It will not fill up the same, but the filling up process is not always by any means the nourishing process. We must always bear in mind that it is not what we eat, but what we digest, that is any benefit to us.

One authority gives one quart of milk equal in nutritive value to one pound of beef, and another authority gives one quart of milk equal in nutritive value to one quart of oysters, yet what a difference in cost. Should we not be thankful that such a highly nutritious food as milk can be had at so comparatively small cost? One important thing to be remembered, is, that milk should never be boiled, if possible to prevent it. When boiled it is rendered partly indigestible, because the proteid, or muscle and tissue building part, is hardened, and is thus made difficult for the stomach to work on. Again, milk, when heated, if left without a cover, a scum forms on the top of it, which has to be removed to make it palatable, and we thus lose a valuable part of it, the protein. I may here say that a cup of warmed milk on retiring is one of the best and safest cures for insomnia. I can testify to this from personal experience. Skim milk should be valued more than it is. It still contains nearly all the protein for building muscle and tissue and making blood and bone, and half the value for heat.

Then, too, we have buttermilk which is also valuable. One glass of good buttermilk is equal in food value to half a pint of oysters, and yet what a difference in cost. It has a little less protein and sugar than skim milk, but more fat.

Mrs. Butler, in her excellent paper on gardening at our last meeting, advised gardening as the best tonic and a great help in saving doctor's bills. Miss James advocated attending poultry as an excellent cosmetic. My advice is a glass of buttermilk taken every day, as a thoroughly good tonic and cosmetic combined.

I will close by making an appeal to mothers to have a better understanding of the different food values, that we may send our husbands and sons and daughters out into the world with strong bodies and well-stored minds, that they may be well equipped for the battle of life. We are nation-building and the sure foundation rests with the women of the 20th century. There is more truth than poetry in the saying, "That the hand that rocks the cradle is the hand that rules the world." I was particularly pleased at some of the things the Bishop of London said about Canada after his visit here last year. The finest thing he said was, "That in all his travels, the children of Canada that he saw on the streets going to and from school, etc., where the healthiest, merriest, cleanest and best dressed children he had ever seen." Now, I think he could not have paid our country or our women a higher compliment than that. Healthy, merry, clean and well-dressed children, come only from homes presided over by capable and intelligent mothers.

SOME MISTAKES IN THE DAIRY.

By Miss Bella Millar, Guelph.

A writer for an agricultural paper once said: "Some people consider that keeping cows is dairying. Now, I think that making cows keep you is nearer the mark."

The keeping of unprofitable cows is a great mistake, and it is an easy matter to keep a cow record and to test the milk and know exactly how much each cow is producing.

It is not necessary in this paper to say anything about the care and handling of milk, because there has been a great deal written along this line lately, and the Women's Institutes have received the benefit. I refer to Bulletin No. 160 on "The production, care and uses of milk." Also to the Report of the Women's Institutes for 1907.

The Institute reports and bulletins contain much valuable information along many lines and after they have been read might be kept for reference, but I am sorry to say that in many homes this literature is destroyed very soon after it is received.

Referring to the care of milk, the two great essentials are *cleanliness* and *proper cooling*.

The cream separator is so largely used at the present time that a talk about the mistakes made in handling separator cream might be a help, especially to those who are about to purchase a separator. We now know that it is not necessary to learn every lesson by hard experience, because we can save a great deal of worry, and often save time and money as well, by being willing to learn from the experience of others.

Neglecting to cool the cream has been the cause of inferior quality of butter; so let us always cool the cream quickly to a low temperature as soon as we have finished separating. After the fresh cream is cooled, it may then be added to the cream that has already been collected for the churning.

Another mistake is that of taking a thin cream from the separator. It would be to our advantage to take a rich cream for butter-making, whether it is to be manufactured into butter on the farm or in the factory. If we are sending the cream to the creamery, we will be leaving more of the skim milk on the farm, and let us remember that the creamery man is not paying us for skim-milk. We find that the richer cream does not sour so readily, and this is a help, especially when the cream is not collected as often as it should be. There is not as much cream to handle, and it can be churned at a lower temperature than a thin cream. These are some of the advantages of taking a fairly rich cream for butter-making.

Neglecting to keep the separator and its surroundings clean has been the cause of much tainted cream. The parts of the separator that the milk comes in contact with should be washed every time that milk is put through.

Another thing we should always remember, whether we are using shallow pans, creamers or the cream separator, and that is to stir the cream from the bottom to the top every time fresh cream is added to the cream can. A stirrer such as is used in the O. A. C. Dairy,—a saucer-shaped piece of tin with a heavy wire handle—enables the butter-maker to do this important piece of work quickly and thoroughly. I would suggest to anyone ordering a stirrer of this kind to ask the dealer to tin the handle. If this is not done it is apt to rust.

In ripening the cream for churning, let us develop just as mild acid flavor. The day has gone by when the cream was allowed to become quite sour before churning. We must watch the trade and supply what is in demand, and we find that a clean mild flavored butter is what is wanted.

If we should be using a culture or starter to assist in the ripening, let us beware and use only that which has a flavor such as we would wish the butter to have. No magic takes place during the process of churning—the flavor of the butter is determined before the cream goes into the churn. If we have given the cream proper treatment up to the time of churning, it will be glossy and smooth and perfectly free from lumps.

A mistake is often made in putting the cream into the churn without straining it, and that is why we sometimes see little white specks in the butter—particles of curd which should not have been in the cream, and which would have been kept out of the churn if a strainer had been used. This butter not only has a poor appearance, but poor keeping qualities as well.

Too often we try to churn at the same temperature that a neighbor is using and forgetting that the conditions under which we are working are very different. Let us in choosing churning temperature remember that a great many things have an influence, such as the richness of the cream, amount of cream in the churn, the feed the cows are getting, length of time the cows have been milking, the temperature of the dairy room, etc., etc. And so we will choose the temperature that will bring the butter in nice firm granules in from twenty to thirty minutes.

Do we make use of every opportunity we have for visiting other dairies and creameries? We can always learn something that will be of help to us. One farm butter-maker visited a creamery, and she noticed that, before they put the wash water on the butter, they rinsed off the butter, and she went home and put into practice this excellent method.

In the cold weather we should temper the wash water, taking into consideration the condition of the butter in the churn, and also the room temperature, and using water at such a degree that the butter will be neither too hard nor too soft, but of a nice consistency for working.

Some of the mottled butter we see is caused by the use of very cold wash water. Parts of the butter become chilled and hardened, and so are paler in color because they do not take the salt as readily as the softer parts.

Regarding salting, let us not only buy a good quality of butter salt, but let us vary the proportions used to suit our customer. It is very poor business policy for us to try to make the people take what we like. If we look about us in this age of competition we find the manufacturer studying the likes and dislikes of the people, and he succeeds by catering to their tastes.

Gentle pressure only, is the rule for working butter, but we find a great deal of butter made unpleasantly greasy by wrong methods of working; by overworking, and by trying to work it when it is too hard or too soft.

There are a few simple labor savers that might be in every dairy to lighten the work and add to the pleasure, but let us see to it also that we use our labor savers to the best advantage and not do as we see so often done with the brick butter print. Instead of the butter-maker putting the print down on the butter and filling it quickly, we see the print held up in the hand and the ladle used to try and pack a pound of butter into the print.

In buying parchment paper for wrapping our butter, let us note that the paper is of good quality. Lots of good clean butter looks anything but inviting because cheap paper of a grayish color is used, giving the package an unclean appearance.

We know that there is keen competition among the manufacturers of the various foodstuffs, and when we look over the shelves in the grocery store we realize that it is the neat attractive package that catches the eye. This should teach us that the clean tidy butter package helps to sell the butter, because the eye influences the palate.

The dairy chain is a long one, and we have a great many links to look after in order to have the greatest success. So let us not neglect one of the many little things, because the failure of one has an effect on the whole.

We make a mistake in thinking that our work is completed when we finish printing the butter. Our place of storage is an important link in the dairy chain. Let us choose a clean, cool, dark place where the temperature is low and even.

I might give an instance where a woman brought a can of cream to a meeting to be churned. She also brought a pound of her last churning to be scored. Although the butter made at the meeting was of good clean flavor, the pound for scoring had a decided "cellar" flavor, showing that, although the cream had been kept in a good place, the butter had not. Many instances might be given to show how very readily milk and its products will take on taints and odors and flavors.

Again we may make the finest butter, but, if we do not protect the packages in transit from farm to market or customer, we will undo our good work. Many times in the summer weather butter becomes so softened that it has to be placed in a refrigerator in town before it can be handled. The best refrigerator in the world cannot restore the texture to that butter, and this greasiness also affects the flavor.

One of the most common mistakes made in churning, and yet one of the easiest to remedy is that of having too much cream in the churn. Having the churn about a third full would make the churning easy and the results more satisfactory.

If the cream is thin, change the separator screw so as to take a richer cream, and in that way there will be less for a churning. If the richness of the cream is correct, it will then be necessary to arrange to churn more frequently. An extra churning in a case like this does not mean more work, but means easier work and time gained.

I am sorry to say that so many have thrown away a churning when the butter came about the size of clover seed, and would not gather. Very likely the cream was too thin and too cold. If so, get rid of some of the liquid in the churn and so bring the little particles of butter closer together; also raise the temperature of the churning slightly so as to make the butter particles soft enough to adhere. Take the temperature of the contents of the churn, add a few quarts of water a few degrees higher, give a few rounds of the churn to get the contents mixed, let the churn stand for a few minutes to allow the butter to float, then draw off part of the diluted buttermilk. Continue the churning and very soon it will be completed. Next time we will avoid this difficulty by beginning to churn at a higher temperature, or by taking a richer cream.

Reducing the amount of liquid and revolving the churn at a slower rate will help us to overcome the trouble that is experienced when trying to gather the butter from a thin cream.

The room temperature is not considered as often as it should be, but, if you are required sometime to work in a very warm room, begin churning with the cream a few degrees lower than you would have had it if you had been in a room at proper temperature. If some wintry day you are obliged to work in a very cold room, commence churning with the cream a few degrees higher. I believe that some of the long churnings in the winter are caused by cream getting too cold on account of the room temperature not having been taken into consideration. If for any reason you discover that the cream in the churn is too cold, and thus taking a long time to churn, raise the temperature by heating the cream, not by putting the hot water in the

churn. Draw off the cream and heat it by placing the can in a vessel of warm water. Keep stirring and watching the thermometer closely until the cream reaches the desired degree.

On farms where summer dairying is the specialty, we often find trouble in the winter because the cream is held too long before churning. To churn often, even though the quantity is small, would mean easier work and better flavored butter as well. Sometimes when the amount is small, and there is none to sell, the butter-maker is not so particular, and we hear the remark, "Oh, it is only for our own family."

Other things which assist in making the work easier are to have a fresh cow in the herd occasionally, and to feed the cows some succulent food.

The subject of butter-making is a large one. Much has been written from time to time on difficult churnings, defects in butter, and other phases of the subject, and still new questions arise. It is for each butter-maker to learn all she can from her experiences, and to study the lesson of cause and effect. Many difficult churnings have been repeated because no effort was put forth to find out the reason why. If we discover the cause, usually we can quickly find the remedy.

We are very fortunate in having many means for obtaining information along dairy lines, and in closing I might mention some of them: Farmers' Institutes, Women's Institutes, Institute literature, Agricultural papers, Dairy papers, dairy exhibits at fall fairs, butter-making competitions at the larger exhibitions, visits to dairies and creameries, the O. A. C. and Macdonald Institute courses, and especially would I recommend to our farm butter-makers a course at a dairy school. The expenditure of the necessary time and money to take a full course will never be regretted. Even the person who cannot spare but a short time to go to such an institution will go back and take up the home work again with new ideas, fresh endeavor and added dignity. She has studied the principles which underlie her work, and "knowledge is power" in the dairy as elsewhere.

GROWTH OF CANADA, AND HER WELFARE.

By Miss M. V. Powell, Whitby.

There is a spot in this vast world of ours where is the brightest sunshine, the bluest waters, the purest air, the sweetest flowers, and many of the choicest gifts which nature can bestow—the Land of the Maple!

How the name of our beloved country thrills us as we hear in song and poem of her glory and her beauty, her wealth and her progression. How our pulses quicken, and a feeling of exaltation fills us, as we realize that this grand, noble and beautiful country is the land of our birth!

> "A vast dominion stretched from sea to sea,
> A land of labor, but of sure reward,
> A land of corn, to feed the world withal,
> A land of life's best treasures, plenty, peace,
> Content and freedom, both to speak and do."

Speaking of our fair land, one of the British journalists who recently made a tour through the Dominion, said: "To see Canada should form part of every Englishman's education; he knows it on the map, he knows its length, he knows its breadth, that it contains a vigorous and patriotic population, but he can never grasp the realities of Canada until he sees it."

And so we say to you: See Canada. Know your own country, and its vast possibilities! It is now one hundred and fifty years since Canada became part of the British Empire, and we see her to-day grown great among the countries that encircle the mother country.

We sometimes hear around us talk about her becoming an independent nation, and severing herself from the Empire. Canada is yearly coming closer to her destiny as a nation, in alliance with the Empire. We now make and administer our own laws, we set our own taxes, and spend the proceeds. What advantages of independence are there which we do not now enjoy? By the latest development we are to be consulted by Great Britain regarding all foreign matters touching ourselves. And with these advantages we have the inestimable gain of being part of the greatest Empire in the world, enjoying the prestige and protection of its power. What figure should we, as an independent nation of six millions of people, cut in the world to-day, compared with the position which we occupy as a part of an Imperial people numbering four hundred millions?

Many of us believe that Canadian history began within the last fifty years, but men have died for Canada before the white man's foot ever pressed the soil on which Toronto now stands. We now whirl in cushioned comfort along the shores of rivers up which anxious pioneers once pressed, their eyes searching the banks for the feather of the lurking Indian. Gray old Kingston seems to us to be one of the settled pillars of the world—an ancient city—but it once was Fort Frontenac, where the intrepid explorer founded a trading post to meet the Iroquois.

The land of Canada is one of great plains, of splendid forest stretches, of lofty mountains, of wonderful rivers, of wide-spreading lakes, and the most magnificent system of waterways in the world.

In 1837 Canada's system of canals was but in its infancy. The first vessel passed through the Lachine Canal in 1825, and the Welland Canal was opened in 1829.

Four years before Queen Victoria came to the throne the first ship to cross the Atlantic, propelled wholly by steam, was built at Quebec, and made the voyage from Picton, N. S., to Gravesend, Eng. To-day, Canada has a trans-atlantic service equal to the best, and owing to the geographical advantages of the Canadian route, and judging from the improvements of the past few years, it promises soon to excel all rivals.

Canada possesses more lakes and rivers in proportion to its territory than any other country in the world. She is the playground of America. During the summer months the portions of the continent which are really delightful are nearly all in Canada. It is not too much to suppose that more than a quarter of a million tourists will this year touch Canada in their search for Nature's marvels, for midsummer relaxation, and for new hunting experiences.

The Canadian of Ontario birth can survey his broad territory from the sweep of our proudest river to the dark shores of our largest lake, and feel that nowhere is to be found a more glorious holiday scene for those who want the breath of the pines, and gleam of the waves, and the golden sunlight of the northern summer. Lord Crewe, speaking of Canada, said: "She has turned a wilderness into a smiling land of industry and commerce, has developed a great railway system, has undergone all the experiences that go to make up the life of a great nation, and now stands in the forefront of the civilization of the world." The year before Queen Victoria came to the throne, the first railway was opened up, running from Laprairie, opposite Montreal, to St. Johns, on the Richelieu River, a distance of sixteen miles, and for ten years it was the only railway in the country. At the close of

Victoria's reign there were 18,140 miles in operation, and to-day Canada has 22,452, the largest mileage in the world in proportion to the population. One hundred years ago there were neither steamboat lines nor railways.

It was not until about sixty or seventy years ago that steel spring buggies came into use, horseback riding being the most convenient means of travelling through the pathless woods. To-day, man and science have combined forces and taken captive the powers of earth, and given us the now universal electric machines, for the farm and city, over land and sea, alike for business or for pleasure.

And what of our means of communication with the world? Even sixty years ago the people in Canada had no stamps, no envelopes. They wrote their letters on one side of a sheet of letter paper, folded the paper, then wrote the address on the unwitten side, and fastened it with sealing wax. But thanks to Rowland Hill of England, we have not only postage stamps, but cheap postage. In place of paying seven and twelve and a half cents to send a letter in Canada, or to the old Country, we now have a two-cent rate to nearly every part of our land. Yet the first stamp issued in Canada was in 1851.

Then the comforts and conveniences we enjoy are really of recent years only. It was not until seventy or eighty years ago that cooking stoves came into use. We can scarcely realize that it is only a little more than fifty years since coal gas was introduced, coal oil within the last half century, and incandescent and electric lights within the last twenty-five years. When we pause for a moment to consider, and picture to ourselves our grandfathers and grandmothers moving around in the hazy light of the tallow candle and the firelight, we are impelled to exclaim "Truly what great changes the past century has wrought!" When we stop to consider, we have reason to be startled by the fact that we are now enjoying so many privileges that were unknown even fifty years ago. We are led to conclude that the past century has seen more progress than any previous century of which we have any record in the world's history. The history of Canada since the period of Confederation has been a history of commercial and social development, and the coming years will undoubtedly demonstrate to the world the truth of Sir Wilfrid Laurier's famous utterance, "The 20th century belongs to Canada." Why? Because its capacity for supporting population is so great that it can only be surmised at present.

Some people noticing the trend of conditions in other countries, speak of the possibilities of hard times, but, if Canada simply held her own instead of advancing, she would be a wealthy and prosperous country in comparison with other lands. She now has the largest gold field in the world, and the richest nickel, asbestos and cobalt mines in the world; but while the resources of the Dominion in minerals, forests and fisheries are very great it is in its soil that the greatest wealth of the country lies. We must never forget with the dazzling growth of our manufacturing interests, that we are, and must remain probably for the better part of a century, first and foremost an agricultural nation. Canada now has the largest consecutive wheat fields in the world.

The agricultural industry engages the efforts of over-fifty per cent of the population of Canada, and provides the great bulk of the exports to foreign countries. Under such conditions the fostering and developing of agricultural interests are of pre-eminent importance to the people. The assistance given to agriculture by the Government is one of the features of Canadian administration, about one and a half million dollars being expended annually in its behalf. Three of the provinces of the Dominion now maintain

agricultural colleges, which offer courses of instruction to farmers' sons in agricultural and allied subjects. Investigations have been made regarding the cost of production of various crops to determine the most economical methods of seeding and cultivation. Thousands of farmers have joined in co-operative tests of seeds for improvements of crops, thousands of samples of grain of various kinds were sent to farmers of Ontario and Quebec. The Canadian farmers are showing a growing desire for the latest scientific information bearing on their industry.

The dairying industry has steadily grown for the past forty years, until now many counties in Ontario and Quebec are devoted almost exclusively to butter and cheese production.

The Canadian west is, however, the wheat growing belt of the country. "Because Canada was north of the United States it was cold." That was the reasoning with the majority of Americans until reports began to come back of a wonderful Chinook wind that came from the west, and found its way through the passes in the mountains, and put the cold to flight; of days eighteen hours long and every hour full of glorious sunshine; of an air packed so full with ozone, and so free from damp, that one had to look at the thermometer to realize it was winter; hence to-day, the migration from the United States to Western Canada continues in large numbers.

The *Omaha Bee*, in a recent issue, published an interesting article on the development of Western Canada, and the part played therein by Americans, "In keeping with their reputation for a determined and untiring search after opportunity and material advancement," says the article, "Americans pushed forward and came to the Chicago of Canada—Winnipeg. They pushed westward and saw the great factor which would eventually make the twentieth century the century of Canada. They saw a country of marvellous possibilities, if unlimited resources. They took advantage of the opportunities they saw. Shrewd business men see in the heart of the greatest wheat producing area in the world, the city which is feeling daily the heart throbs of the ever-growing commercial activity of Western Canada—Regina, and as an evidence of their belief in its possibilities have named it "The Omaha of Canada."

In the great west more than 200 million acres will produce wheat, and could undoubtedly, if properly developed, cover many times England's demand for wheat to meet her annual bread deficiency.

Not until the dawn of the present country did the people fully appreciate the agricultural possibilities of Western Canada; and in spite of the magnificent showing of the past year, we all know that the country is only on the threshold of her developments.

A word as to the educational side of our country. Education is a field in which Canada could well afford to lead the world. We are not hampered, as in Britain, by ancient precedents and the covenants that go with endowments. We have a people of more uniform earning capacity than any nation on the continent, and hence, people in a better condition to take advantage of educational facilities. We can spend on education what most other countries must spend on an army, or navy, and we are at least as well off, on an average, as most of our rivals in a general capacity.

We have more than 20,000 public schools, attended by over one million pupils, 17 universities and 53 colleges, with 15,000 students. In all these halls of learning women stand side by side, oftentimes stepping ahead of the stronger sex. In Ontario the only profession now closed to women, is the ministry, the reason for which is given in two of the States; one, that she is too good, being "an angel," the other, that she is too full of evil, being the cause of the fall of man.

In the days when there were new lands to discover, women were still dwelling figuratively in the old land of bondage, and, therefore, no woman's name appears among the discoverers or early explorers of Canada. To-day, to the women of Canada is given very largely the work of making the glorious future of our fair Dominion, and she is doing a noble work in holding up high ideals of truth in every-day life, in the refinement and education of the home life.

If Canadian working men are to make the progress which they should, and if Canadian industry is to take on the steady development which seems possible, something must be done to provide the working men with both education and amusement. Instruction in the theories of advanced work in his own trade will help to keep him from dissipation, and will add to his earning power. Amusements of a proper kind will tend to prevent his looking to the bar room for that cheer and comfort and sociability, which have made it a power in the land.

It is estimated that the tide of immigration brought into Canada last year 300,000 people, which means an invading army of about 6,000 a week. One out of every twenty immigrants in Canada comes from foreign shores. Is this invading army of immigrants to drag us down and foreignize us, or are we going to lift up and Canadianize it? One of our greatest responsibilities lies in the treatment and assistance which we are to accord to our adopted brother Canadians.

HOW SHALL WE KEEP THE BOY'S HEART IN THE HOME?

By Miss Lila A. Eyre, Toronto.

Every mother confronts vital problems which she must solve single-handed. She may be well read, well informed as to food values, physical culture, home remedies, and her education may even extend well into various practical lines. Nevertheless, she will meet circumstances and conditions, the judicious treatment of which may mean so much, not only to her, but to her family and to deal with these she has only her own experience, ingenuity, tact, motherly love and common sense. Many a mother, though she may not speak of it, finds these difficulties tracing lines of worry in her face and ageing her by years.

Let us look straight into one such problem. "How shall we keep the interest of our boys in the home?" Every mother wants her boy to meet people and to learn his place in the world. To do this it is absolutely essential that he see what other homes, other individuals are doing, and one very good way to personally enjoy this branch of a son's education is to invite his friends to the home.

Parents frequently set themselves upon a pedestal of authority, when they should take their children by the hand and advise them and devise with them, which will in no way depreciate parental love, but, on the contrary, will inevitably strengthen it and foster individual effort and a love of co-operation between children and parents. Children should be encouraged in reasonable "hobbies," particularly those of a practical nature. A financial interest in the farm often spurs a young man as nothing else will.

No boy has any right to be turned loose upon the public without a knowledge of the ten commandments for his moral guidance. The principles of justice must be instilled into every sturdy fibre!

The boy has to know himself. He has a body, a mind and a soul, each of which needs food for growth. Without a knowledge of the body, which not infrequently is so sadly neglected, he is no safer than if placed in a running railway locomotive. If the line is straight, he may meet no serious accident, but most lines have sharp curves, stops, and, not infrequently, obstacles in the way. Prepare him for these. Teach him botany. Teach him physiology. Give him to understand that his body is a very fine machine, loaned him for a time that he may by living, bring character and usefulness into his own life and into the lives of others.

Give him facts as he is ready for them. Teach him that obedience to nature's laws means health; that their violation means disease. Even the boys in a well regulated home should have a fair grasp of food values and their relation to health. This is one of the questions at the very base of all morality. There is more sin and sorrow directly resulting from incorrect diet, than from all other causes combined. Bad food and drunkenness cause disease. Disease weakens the mind and dulls the morals, and henceforth a train of evil follows, till the radical causes are corrected.

Place good books in the hands of your boy. If he doesn't take to "Pilgrim's Progress," perhaps he may derive as much good from "David Copperfield," or *vice versa*. But next to his Bible, let him have such books as "What a Young Man Should Know." One-half the crime, illness, sorrow and sin of this world would never be known were it not for ignorance concerning those things which it is our rightful inheritance to know. Give your boy the knowledge which will enable him to shun evil.

The organ, piano and violin are most excellent companions. The latter instrument is not limited to dance music. It is the queen of musical instruments, just as the pipe-organ is king. The violin lends to sacred music a delicacy and sweetness all its own. Music satisfies the hunger of the emotional nature and through it we may come in touch with the noblest thoughts translated into tone.

It must be borne in mind that boys are so much unlike that entirely different methods must be used in their education. To determine the best method for a certain case, one must know thoroughly his traits of character and base thereon, one's line of action.

Some boys yield to constant gentle persuasion, others respond to stern discipline; many give their best when put in charge of and held responsible for others, for instance, their younger brothers and sisters, or their comrades in school. How often a boy turns right about face, when made president of a Band of Mercy, a literary club or similar organization. A love of British fair play takes hold of him and calls him to higher responsibility.

Then there is the young man who must have the facts of life before him. He is not satisfied with what other people tell him. He resolves to *see* what others know as good and what others know as evil. The owner of such a disposition places himself in constant danger. So many young men needlessly mar their lives in gaining a knowledge of the facts of life. He who returns "unspotted from the world" will, like Paul, be so convinced of the power of good and the hideousness of sin that he will be a stronghold for good.

He cannot—with very, very few exceptions—do so, however, without a thorough grounding in the principles of a Christian home. He must have a mother who loves and trusts and expects great things of him and frequently tells him so. He must have a mother who constantly prays for him. Prayer is a service of love, deeper, stronger, farther reaching than any of us know.

MAKING THE MOST OF LIFE.

By Mrs. (Dr.) Garver, Slate River Valley.

Once in a while it is well for us to stand face to face with our inner selves and ask and answer questions. Only in this way can we get at the vital truths of right living.

Are we making the most of life along all its manifold lines for the best and highest things of existence? Are we making the most of our opportunities for broadening our own sphere of usefulness and bringing into our own lives the inspirations that reach out for the betterment of all other lives with which we come in contact?

No life, however meagre, is without opportunity for uplifting others and for personal advancement. It may be that the reading of a book—and there is nothing which will make people forget themselves and their troubles as will a good book—or a ramble through woods or meadows will give us an inspiration which will broaden and sweeten our own lives and the lives of our associates. But we must make the best of our opportunities and assimilate the inspirations.

We may spend our whole lives in fruitless longing for the opportunities for culture which lie within our reach if only we would reach out our hands and grasp them. Hence it is wise for us to ask ourselves, "Are we making the most of our opportunities?"

How many of us are making a study of Nature? Think of the hundreds and thousands of dollars which are being spent every year by students of naural history in order to get the knowledge which every country man or woman could gain with but little effort. With just a few books as helps, every one of our rambles in the woods could find us adding to our wealth of knowledge gained from our friends in leaves, feathers or furs. Let us not think we are too old to learn these things, for knowledge should be most graciously accepted at any time in life.

Are we getting the most out of our work? Everyone needs the discipline of mental and physical labor. Toil is not a curse; it is a blessing. Only our mental attitude to work makes it drudgery. When we anticipate a picnic or party, we all know how fast and hard we can work and yet not seem tired. The work was as hard as usual and only seemed easier because of the condition of the mind. Can we not in our daily work find pleasant thoughts and topics for the mind to work upon? We will be surprised how fast our hands can move when we have a pleasant aim in view.

Here again comes the necessity of time to read and obtain food for our mental work. Every mental and physical faculty which is not brought into constant activity becomes atrophied or dead and an active life is necessary to a healthy development of both mind and body. And so we may well ask ourselves, are we making the most of our work, hard and disagreeable through it may be, for our mental and physical advancement as well as for the material gains which accrue from the labor of our hands?

Then, too, do we enjoy our work as we might? Toil and recreation are only comparative terms and often recreation is much harder than work. If we would only clothe our labor with some of the illusions with which we invest our recreation, how much more would we enjoy? We must bring a good deal of sound common sense to bear on every day problems in order to make the most of our own individual life.

The wife and mother who has the care of a home and family on her hands may think her lot a hard one, but her life is not half so wearying to the soul and body as the life of the society woman who exactingly fulfills her

social obligations and pays the price of place and position. Every lot in life has its trials and compensations. Are we making the most of our compensations? Let us make the most of our blessings for, if we just stop and think, they are innumerable.

Are we making the most of our homes? Every home, however humble, may be the crystallized centre of all that really makes life worth living. To make most of our home life, the home must mean more than a place of shelter, wherein we may enjoy the loaves and fishes and gather the material things of this world. Every true home should be surrounded with an atmosphere of perfect and unchangeable love—the love that hopeth all things, endureth all things, suffereth long and is kind.

And if this love, which should be so broad and deep and strong that it stands as a bulwark around our home and family and protects them from the influences of the outside world, is not a living, vital principle in our home, then we are not making the most of our lives. Whose heart does not go out in sympathy for the children reared in homes of discord?

Are we making the most of our friends? A true friend is one of God's best gifts to mankind. Let us make the most of our friends by throwing the mantle of charity over their failings and idealizing their virtues and we will find a satisfying joy in friendship which will go far to make radiant the journey of life.

Let us make the most of all the little unexpected happenings of our daily life and squeeze every possible drop of pleasure from the passing opportunity. If we do all these, we may consider that, so far as in us lies, we are making the most of life.

A GIRL'S POSSIBILITIES.

By Miss Blanche Maddock, Guelph.

It would be impossible to do justice to a subject of such magnitude in one short paper, but I should like to refer briefly to the opportunities that are open to our young women of Canada and also to the responsibilities which they ought to assume.

There is a spirit of unrest abroad in the land, a desire on the part of our young girls to be up and doing, to leave the imprint of their individuality upon the community or upon the world at large.

We are often inclined, as women, when we see the evils that exist and the wrongs that ought to be righted, to think that, if we had the making of the laws, we would set things straight: but in my judgment we have now the making of the laws—not by personal use of the ballot, but by influencing those who are our law makers, the husbands, sons and brothers, of the home.

Men and women are different, are intended by the Creator to be different, both have responsibilities equally important. For instance, men are physically stronger, but mere physical force does not rule the universe. It may do so to a certain extent in heathen countries, but even in the greatest heathen country—China—it is not a man that has been ruling that vast empire, but a woman—the Dowager Empress. Then in order to fit women for their responsibilities, they must have as broad a fundamental education as possible, then, if practicable, a supplementary education in the art of house-keeping and home-making. During the past years education for women has changed. We have now women nurses and doctors and even lawyers and ministers. Women are also going into business of all kinds

and some of our greatest scientists of the day are women. A gentleman once told me that he thought women should receive a business education as they knew very little as to the value of money, but, when it came to science, women had not the head or the brain power to make a success of scientific studies. He then asked if I ever heard of a woman who accomplished anything in science. I reminded him of one of the greatest discoveries of the last few years, that of radium, which was discovered by a woman, Madam Curé of France. In astronomy, we have Caroline Hereshall, and in entomology, Georgina Ormorod, whose books are being used in many of the colleges and universities in the United States. She is considered one of the greatest entomologists of the day. I like to mention these instances in order to show that a woman can do anything, if she sets her mind to it. But what impressed me most was the fact that these women became interested in the sciences largely through helping the men of the home. Caroline Hereshall's brother was an astronomer and was so engrossed in his work that he often failed to take sufficient nourishment and, in order to tempt his appetite, his sister would go to the kitchen and prepare dainty tid-bits that she thought he might fancy. While he was partaking of this nourishment, she would take his readings for him, and in this way becoming interested in the study. Eventually she discovered five comets and did much work along her line. Madame Curé also became interested in the discovery of radium through assisting her husband in the laboratory. The thought occurred to me—were these women not accomplishing as much good for the world while they were in the kitchen preparing nourishing food suitable for the overwrought nerves of the brother and husband, as when they were making these discoveries? What difference does it make to us, as women, whether we do these great things ourselves, of which the world hears, or whether we fit some one else to do it for us?

That while every business, occupation and profession is open to our young girls, at the present time, yet I believe that their most elevating occupation and the greatest opportunity for good, is in the home.

I believe everyone in life has a particular mission, something to do that no one else in the world can do but herself or himself. This thought was brought home to me one morning while waiting for a street car in St. Paul. A number of little newsboys came to me selling their papers; after talking for some time I asked, "Why, boys, do you not go to school?" All but one said, "Nup, haven't time." One replied, "I go to school, but don't you know this is a holiday, to-day?" I said, "Why, what holiday is it?" He replied, "Lincoln's birthday. I thought everyone would know that by this time." The friends with me began talking of Lincoln and one remarked, "Lincoln was the greatest man this country ever knew; there will never be another Lincoln." The thought came to me that probably there never will, because another Lincoln may never be needed. As there are not two circumstances in life exactly alike, so no two people are expected to be alike; that is why the world cannot do without any one of us. Therefore, I believe a girl's special mission is in her home with her father, mother, brother and sisters and everyone with whom she comes in contact.

With her father a girl has a great deal to do in smoothing over the rough places and removing the little things that fret and worry. A girl is usually a companion with her mother, but often she is inclined to thoughtlessly take the little favors such as the half-holiday Institute excursion or trip to the fall fair, while mother stays at home because some one has to do the milking.

I want especially to speak of a girl's responsibilities with her brothers. We hear a great deal about the boy leaving the farm. I have been

told that the reason the boys were leaving was because they were not fairly treated, that while the girls had the use of the parlour and freedom of the house, generally the boy was kept in the kitchen during the winter evenings; in the summer he can go where he likes. Any old furniture, that was not good enough for the rest of the house, was stowed away in the boys' room and the girls have been telling me that the boys do not care, they do not appreciate pretty things any way, so that it does not matter. I find this a libel on the boys of the country. They are just as fond of pretty things as the girls. While at the State College in Minnesota, I visited both the girls' and boys' rooms, and found the boys' room just as dainty and pretty as those of the girls. Their tastes were different, of course, but one could tell at a glance a boy that had come from a refined home, by the pictures on the wall. We cannot expect a boy to go out into the world fired with noble purposes and high ideals, if he has not had the helpful, practical influence of a cultured home.

It rests largely with the sister to see that the house is not only a place for her brother to eat and sleep in, but a "Home." A gentleman once made the remark that the most wonderful thing in the world was a boy. Now, of course, I did not agree with that entirely, yet, as we think of it, the right kind of a boy is somewhat wonderful. There are plenty of them, such as they are, but a boy who is strong enough to say "No" to temptation, to not smoke a cigarette and swear merely because other boys do it, is the boy the country is waiting for. But which would you say was the most wonderful? A piece of sculptured marble, or the sculptor? The sculptor of course. Then I believe the boys are as clay in the hands of the potter or, in other words, are practically what the girls make them.

Many instances could be given of the way in which a girl moulds a character for right or wrong of the young men with whom she associates. A young man once told me the story of his life. He said he came into one of our Ontario towns from the country and made companions of boys with whom he knew his mother would not care to have him associate. One evening the boys said, "Let us go to such a place, the girls will be there," and the thought came to him that it must be all right, if the girls were to be there. As soon as he was introduced to them, however, he found there was not much to be hoped for from that source. The laughing at stories that he would not care to have his sister hear, and the general demeanour gave him an undefinable feeling of disappointment. He did not realize until that time how much he expected from the girls. Things went on, but he had not the courage to break away from such companions. They got playing cards for money until eventually he took $300.00 belonging to his father. It was hushed up in Ontario, but he had to go West and begin again. As he stood at the station in Toronto, he said he felt the loneliest boy in Canada and in order to drown his feelings he thought he would go up and say good-by to a friend of his mother's. This lady met him at the door with the remark, "I see by the paper, Jim, you are going West, and knowing your family as I do, I judge you are the right boy for the West." He said, "That made me wince." On leaving she took me by the hand and looked into my eyes as she said, "Jim, we expect great things of you; we need good men in the West and you will be true to the trust we place in you, won't you?" As he told me of this, a new light came into his eyes as he exclaimed "What was a fellow to do when a woman talked like that? What else could I do but be true to the trust that a woman placed in me?"

I believe this boy touched the solution of the social problems of the day. If our girls would hold up a high ideal in life, living up to it as far as possible

and expect young men to do the same, the wrongs would soon be righted and places that we are so anxious to see blotted out would soon disappear.

Another way in which the girls influence the boys with whom they associate is this: Oftentimes young girls go with the boy who will give them the best time, or in other words, the one who will spend the largest amount of money upon them. Last fall in Winnipeg I asked my nephew if he had made any girl friends. He replied, "No, Auntie, I haven't, they cost too much." Then he added in an undertone, "I want to tell you something. If a fellow can go with the right kind of a girl, there is nothing equal to her friendship to keep a fellow straight. It is like this: I can afford seventy cents or one dollar once in a while to take a girl to a concert, but that is the least part of it. After that, we have to go into the restaurant, and by the time you get home you find you are five dollars poorer for the evening's fun." I told a young girl of what my nephew had said and she laughingly replied: "At our age we do not care for any one particular boy, so we go with the boy who will give us the best time and spend the most money on us."

Girls,—We all like to have a good time, but do you never realize that the average young man cannot afford to spend $5.00 for an evening's entertainment, at least not often. Why not ask him to your home after the concert, rather than allow him to spend more money in a restaurant.

I believe this is woman's age. The weal or woe of the country lies largely in the hands of the women. Then let us realize our responsibility in the up-lifting of a nation during the making of an ideal home.

"A house is built of brick and stone,
Of sills and posts and piers,
But a home is built of loving deeds
That last a thousand years."

"Although but a humble cot,
Within its walls may hold a home
of priceless value
Built of love's Eternal gold."

"The men of earth build houses,
Halls and chambers, roof and domes;
But the women of the earth, God knows,
The women build the homes."

FRIENDSHIP.

Paper Read at One of the Regular Monthly Meetings of a Branch Institute.

What is friendship? The dictionary informs us that friendship is intimacy united with affection, friendly feeling, amity. To enjoy friendship, we must of course have friends, the definition of which word is somewhat similar. A friend, we are told, is one joined to another by affection, a confidant, a supporter, a companion.

It has been said by some writers that women are incapable of true friendship, that our natures are so small and narrow that there is not room in them for a real unselfish friendship. We must certainly hope for the honor of our sex that this is a libel. Certainly the ideal friendships recorded by history have not been between women. There is, I am afraid, a certain amount of truth in the statement, as we find in many instances, that women on the whole are not so sincere and honest with their own sex as men.

The essential attributes on which true, lasting friendships are founded are absolute sincerity, reliability, and unselfishness, and these are qualities we may all possess by cultivation, if not by nature. There must also be some special bond of union. We must, to some extent, like and admire the same things; but the one rock on which true friendship must be founded is sincerity and confidence. Without it there can be no enduring friendship. If we doubt our friends, we have little enjoyment of them.

True friendship is not influenced in any degree by special position, wealth or poverty. Let us look at the ideal friendship presented to us in the Old Testament—David and Jonathan, the one a prince, the other a shepherd, yet at the first meeting each was mutually attracted, finding in the other, qualities of heart and mind to admire and love, and as time went on they loved each other more and more.

In spite of all the variations in David's career, one time first favorite with the king, because by him the Lord had delivered Israel out of the hand of the Philistines, next fleeing for his life, disgraced, enemies on every side, still we find his friend Jonathan standing by and helping through all his difficulties, shielding him from the wrath of his father, the king, and even when it was made known to Jonathan that David, by God's appointment, should reign over Israel in his place, even then his love and loyalty to his friend was so firm that he was willing to take the lower place, if by so doing he retained his friend. Such friendship is sublime in its unselfishness. Well may it be said, "A true friend is one of God's best gifts."

How many of us in times of dire extremity when it has seemed as if the whole world were against us, have found our hands strengthened and our hearts uplifted when a true friend has appeared, helping and comforting us. In times of sickness, disgrace, or bereavement, when our hearts are aching, our bodies worn out with watching or weeping, do we not find cause to thank God once again for his good gift—a friend, one who comes to us, it may be, with the hand of loving service; it may be with the hopeful, cheering word, or it may be simply the loving clasp of the hand.

It has been said, "Sweet are the uses of adversity," and friendship is certainly one of its sweets, for then we appreciate it as we could not possibly do if our skies were clear and the sun shining. Then again, in adversity all friendships offered can be enjoyed more fully, as we are then confident it is not our position or station, but ourselves alone, for which we are desired.

It is said that Mrs. Sage, widow of the multi-millionaire, has so often been deceived by people professing friendship, but who merely wished to receive personal benefits from her, that she has almost lost faith in the friends she has known for so many years; so poverty has its compensations after all, for if we then possess any friends we have the comfort of knowing it is not what we have, but what we are, that attracts them.

Almost all of us know what it is to be homesick and lonely and perhaps at times, when the strain has become so great as to be almost unbearable, some small token from an absent friend, a letter telling us how they miss us, speaking words of cheer and appreciation, does it not lighten the burdens and make the loneliness vanish as by magic? We live the old happy times over again and, lo, our burdens are hardly felt, our weariness rolls away, leaving us ready to face life once more.

Perhaps we have troubles we do not wish the world to know, problems we do not know how to solve. Instinctively our thoughts go out to the trusty friend and, as we pour out our difficulties and problems into her ear and she listens and counsels, and if we are wrong reproves us, sympathizes and smooths out the crooked things, and the tangles vanish, how much smaller our troubles then look!

Some people seem to have a genius for making friends. They are so friendly themselves, so cheery and sunshiny that instinctively people are attracted to them. Certainly they are to be envied, and we who do not possess this gift naturally must do our best to acquire it, and, so far as my observation goes, it seems there is nothing like genuine unselfishness for attracting and holding friends.

Let us above all things be loyal to our friends, under no circumstances listening to any tales or repeating anything to their hurt. Let us avoid the tale-bearer as we would poison. It was earth's wisest man who said—"The whisperer separateth very friends."

Do not let us expect too much from our friends. Surely they will have faults, and our only way is to remember that our faults are probably much more numerous than theirs, and to be thankful that they will put up with our weakness and failures. We are so apt to be surprised at any little failure on the part of our friends to come up to the ideal we have formed of them, so ready to take offence where none is meant, so hasty in our judgments, that many times we allow a very small thing to build up a barrier between those we love dearly—a little misunderstanding—and before ye know it almost, the friendship we value so highly is broken and we are left sorrowing. Let us watch these trifles and so preserve our friends.

Then again, by making true friends we are leaving a valuable legacy to our children. My mother died when I was very young and I know her principally through the appreciation of her friends. Many times have I been lovingly welcomed and cared for, not because of anything in myself, but because they loved my mother, and how my heart would glow as I heard friends speaking of her goodness. We may be able to leave our children much of this world's goods, but if we can bequeath to them a few tried and true friends, that will mean much.

If by reason of temperament or circumstances, there are any of us who do not possess earthly friends,—perhaps some have lost confidence in people through trust betrayed; perhaps some are so reserved that they cannot speak out their difficulties and sorrows to any person—there still remains the one Friend who never disappoints, never betrays confidence, is never lacking in sympathy, is always present, ready to hear and to help, the Friend who sticketh closer than a brother. How good it is to be able to say:

"Friendship with Jesus, fellowship divine,
Oh the blessed, sweet communion—
Jesus is a friend of mine."

In conclusion, I would like to say a word of appreciation of our meetings. They have been the bright spot of the month to me. The kindly greetings and hearty hand clasps have been a great help and cheer. Both myself and my home have been benefited, and I have no doubt this is the experience of the other members. Hence to those who are still outside, we say, join us and we will do you good.

REPORT OF ONE OF THE REGULAR MONTHLY MEETINGS HELD BY THE ST. GEORGE WOMEN'S INSTITUTE.

We thought it well to give herewith a report as written by a visitor, Miss Mary Yates, one of our regular workers, to the St. George Women's Institute. It indicates the progressive spirit which characterizes this

organization and we trust that the suggestions contained in this report, as to methods whereby the young girls of the Institute amy be enlisted in the work to a larger extent, will be found helpful.

On October 6th, St. George was basking in the boon air of a lovely Indian summer day. Picturesque groups of trees in mellow gold and scarlet could be seen stretching out to the horizon line. Amongst them were the charming residences which are managed and, in many cases, have been designed by the progressive intelligent women of this pleasant neighborhood.

The town is well situated, too, for most things, with the exception of its relationship to the railway station. No bus being available for passengers by the noon train, the writer quailed before an uphill walk of a mile, accompanied by a heavy suit case. However, this had to be attempted; with the result that, after much effort, half way to the town saw a forlorn looking object seated upon the suit case in the midst of the board walk, the remainder of the journey appearing a perfect impossibility.

At length a fine-looking dusty miller made his appearance. Quoth he, "I have been trying to lend people a helping hand all my life, and if you'll get off that suit case I'll carry it back to the town for you." That is the spirit that animates St. George too, no less than its enterprising branch of the Women's Institute.

One of the regular monthly meetings of this organization was held that afternoon, and this proved of the greatest interest to both members and to the ordinary visitor. It is of course a great advantage that the Library Hall is used as the place of meeting. The decorations and general comfort of the place conduce not a little to good meetings.

The President, Mrs. Walter Patten, was in the chair and conducted the programme in a most business-like way. The popular and energetic Secretary, Miss Burt, read the minutes of the last meeting, and gave encouraging reports of the work in the branches at Paris, Moyle, Tranquility and Glenmorris.

A paper on "The Value of Cheerfulness *versus* Worry," was read by Mrs. J. E. Hawkings, wife of the Baptist minister.

We present herewith a brief report of this paper. The subject was presented in a fresh and interesting manner, and it was evident that Lubbock's "Pleasures of Life" had been enjoyed by the authoress. Some of the more striking paragraphs are now quoted, though, indeed, the whole paper is of interest.

"There is no such thing as finding true happiness by searching for it directly. It must come to us through the happiness we give to others, for by sowing cheerfulness we reap love. Only a detrimental influence can result from sowing worry, for it is a contagious trouble, and we know full well that soul touches soul, thought touches thought, feeling touches feeling. To be happy ourselves is the most effectual contribution to the happiness of others. Some people move through life as a band of music moves down the street, flinging out pleasure on every side through the air to every one near that can listen. Cheerfuluess promotes health and is the bright weather of the heart in contrast to the clouds of worry. It warms like a sunbeam, charms like a brave leader, and binds like a golden chain. A cheery woman deepens the joy of those about her. Cheerful looks make every dish a feast, and we should cultivate this cheerfulness in our youth, if we wish to have the benefit of it in our old age.

"There is a physical as well as a moral side to the problem of worry, and a medical man was heard to say that more people break down from worry and anxiety than from over-work. There is a certain art in keeping ourselves happy; in this respect, as in others, we require to watch over ourselves almost

as if we were somebody else. We sin frequently in the region of thought, in which we create so many imaginary situations that we sometimes lose moral tone, and when some actual trouble occurs we find ourselves so lowered in power of resistance that our self-control is injured. Worry is utterly useless and the results always bad; one cannot think clearly, the temper is tried and the door is quickly opened to worse things. It should be remembered that Lyman Beecher said he got on very comfortably after he gave up running the universe."

How the Young Girls are Interested.

For some time, the directors had felt that it would be well to adopt special means to interest young girls in the work of the Institute, so at one of the meetings, five school girls were chosen from families where the mothers were known to encourage their daughters in housework. These girls were invited to meet the president and secretary, with whom they consulted as to what demonstrations they would select for the next Institute meeting. After Mrs. Hawkings' address, a prettily arranged table, laid with appetizing dainties made by the girls, was uncovered before the audience.

Miss Millie Cornell served finely shredded cabbage salad in cups made of green tomatoes. Mayonaisse had been mixed in the salad and the dressing consisted of hard boiled eggs. Miss Hazel Doud had made salmon salad in alternative layers with hard boiled egg. A pretty salad bowl, and a cooked dressing edged with a wreath of parsley, gave finish to this relishable dish. Miss Clara Graham contributed sweet tea biscuits with currants in them. These were no larger than a fifty cent piece, but so light and fluffy that, when split and buttered, they were irresistible.

Another kind of cabbage salad prepared by Miss Mary Drake, was particularly appetizing in appearance. This young lady had driven in from the country, and explained that the eggs should have been on top, but that the horse ran over a knoll and somewhat disturbed her arrangements. This salad had a cream dressing and a garnishing of celery.

Miss Campbell's famous recipe for steamed brown bread was satisfactorily demonstrated by Miss Stella Burt. Her success warrants passing it on to other bread makers:—1 pint sour milk, 1 cup molasses—half of this may be golden syrup, 1 teaspoon soda, 1½ cups stoned raisins, 3½ cups Graham flour. Place the mixture in three buttered baking powder tins (1 lb. size)—these must only be half full. Put on the lids, and steam two hours. Then remove the covers and set in a sharp oven for fifteen minutes. Slice, butter, eat and enjoy.

Each girl in turn showed her dish, told how she had made it, then handed it around for inspection and for tasting. Considerable fun was made owing to the fact that the girls themselves ate up all that was left, much to the president's regret, who had been looking forward to buying a dish or two to take home. The whole thing was a great success, and the girls deserve the heartiest congratulations.

In December there is to be an exhibition of Christmas gifts made by the young people, and from the amount of interest already abroad it almost seems as if the officers of the St. George branch had solved the problem of how to interest our girls.

REPORT

OF THE

WOMEN'S INSTITUTES

OF THE

Province of Ontario

1908

PART II.

List of Meetings and Speakers

(PUBLISHED BY THE ONTARIO DEPARTMENT OF AGRICULTURE, TORONTO.)

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WOMEN'S INSTITUTES OF ONTARIO.

ANNOUNCEMENT OF SUPERINTENDENT, 1908.

This volume contains lists of the regular summer series of Women's Institute meetings to be held during the seven weeks beginning May 27th, and at which represnetatives sent out by the Department of Agriculture will be in attendance. The lists include meetings to be held in the northern districts of the Province, as well as in the newer sections of Peterboro' and Victoria and in Haliburton. A list of Women's Institute lecturers with notes as to their experience and qualifications for the work, as well as subjects upon which they will lecture and demonstrate, is also given.

The financial statements for the different districts, number of meetings held, attendance, membership, and other statistics for the year ending May 31st, 1908, will appear in the Women's Institute Annual Report, Part I for 1908, to be printed in the early fall. We now have organizations in 89 electoral districts, with branches established at 453 points, a membership of over 11,000, and an annual attendance of about 75,000.

Delegates are sent out by the Department of Agriculture to attend the 510 summer meetings announced herewith, also to attend many of the Farmers' Institute meetings held during the winter months, when special sessions are arranged for the ladies in the afternoon and union meetings at night. Two hundred and ninety-four points were thus visited by lady delegates during the past winter.

The reports of meetings of institutes held from month to month throughout the Province cover a great variety of subjects; general food topics, exchange of recipes, reading for the household, sanitation, contagious diseases, beautifying of the home, (both inside and out), architecture, care of the sick,—in fact anything which has for its object the betterment of home conditions, finds place on the Institute program. Attention is hereby drawn to the large field covered by the subjects announced herein for delegates. Aside from the educational value of the meetings, there is a great good being done the women in the country by affording a place at which they can meet other women of the locality upon a common ground. Even though the Women's Institute members do not get much information at the meetings, the beneficial influence of mingling with those who have like interests, for one or two hours once a month, and talking over topics of mutual interest, cannot but be elevating. The gospel of better living as being taught through the Institutes has already had a marked influence in the country districts, and for the most part we find the better class of people lending their assistance to the extension of the work. Thus by making home life more attractive, we believe that the tendency to migrate to cities and towns will gradually be overcome, and in the years to come we will find the resident of the city glad to go to the rural district to follow agriculture in some of its many branches.

Suggestions to Officers.

The officers of Institutes are at liberty to decide as to whether both afternoon and evening sessions will be held, or only one session, and to state the hour of meeting, always keeping in mind the time required to reach the place of meeting from the last place visited. For the most part, the afternoon session will commence at 1.30 to 2.30, and the evening sessions at 7.30 to 8 o'clock. A definite hour should be announced

and the meeting should be started on time. At those points where members have to drive a considerable distance, the afternoon meeting should be announced for 2 or 2.30. If an evening session is arranged for, the afternoon meeting should start in good time and close rather early, in order that the members may have opportunity to go home and return in time for the evening session. It is much better to have one long afternoon session at which all the members and their friends can be present than to have two short sessions with only a fair attendance at each.

Do not depend entirely upon newspaper notice; advertise by handbills, folders, etc., but, in addition, urge the members to give personal invitations to their friends and acquaintances to accompany them to the meetings. Full particulars regarding advertising are contained on page 36 of the Handbook. You will note that it is advised therein, that large posters be issued. This is a matter which is left to the good judgment of the officers of the Institute. It might be well to spend the money which would be required to get out these posters in sending out additional personal invitations or in newspaper advertising.

There is no charge for admission to the meetings addressed by delegates sent from the Department of Agriculture. Where the subjects chosen are suitable, we would advise that the larger girls of the public and high schools be invited to attend. These meetings are for all women. Where evening sessions are held, men will be made welcome.

Arrange Definite Programs.

If a demonstration is desired, leave from three-quarters of an hour to one hour on your program for this.

Come to the Institute meeting with notebook and pencil. Be prepared to ask questions bearing upon the subjects announced. The Institute is for the home-makers, and we wish them to make the best use of it.

GEO. A. PUTNAM,

Superintendent.

SUMMER SERIES OF WOMEN'S INSTITUTE MEETINGS, 1908.

Afternoon sessions will for the most part be held at 2 o'clock and evening sessions at 8 o'clock; the officers of the Institutes concerned, however, have the privilege of stating the exact hour and making local announcements accordingly. "Aft" indicates an afternoon session only. At other places it is expected that both afternoon and evening sessions will be held.

N.B.—The lecturers indicated thus * will be prepared to give addresses upon the food value and uses of breakfast foods, eggs, cheese and milk, and will give demonstrations in the preparation of several dishes in which these articles are used. Full announcements regarding the articles required for the different demonstrations, and such other information as will be helpful to Institute officers, will be given by correspondence.

Division 1. *Miss M. Govenlock, Sackville, N.B.; Miss M. Gray, 650 Bathurst St., Toronto, June 1st to 16th; Miss L. Duncan, Emery, June 17th to 26th.

1	Sheridan, Town Hall	Halton	June	1
2	Palermo, Hall	Halton (aft.)	"	2
3	Burlington, Public Library	Halton	"	3
4	Norval, Town Hall	Halton (aft.)	"	4
5	Georgetown, Town Hall	Halton	"	5
6	Ballinafad, Temperance Hall	Halton	"	6
7	Moffatt, Brookville Hall	Halton	"	8
8	Kilbride, Town Hall	Halton	"	9
9	Carlisle	North Wentworth	"	10
10	Millgrove	North Wentworth	"	11
11	Westover, Oddfellows' Hall	North Wentworth	"	12
12	Sheffield	North Wentworth	"	13
13	West Flamboro, Mrs. J. T. Thompson's	North Wentworth (aft.)	"	15
14	Orkney	North Wentworth	"	16
15	St. George, Library Hall	North Brant	"	17
16	Paris, Y.W.C.A. Hall	North Brant (aft.)	"	18
17	Glen Morris, Foresters' Hall	North Brant (aft.)	"	19
18	Ohsweken, Council Chamber	South Brant	"	20
19	Onondaga, Township Hall	North Brant (aft.)	"	22
20	Tranquility, School House	North Brant (aft.)	"	23
21	Mohawk, Mrs. McAlister's	South Brant (aft.)	"	24
22	Burford, Rutherford's Hall	South Brant (aft.)	"	25
23	Cathcart, Kelly's Hall	South Brant (aft.)	"	26

Division 2. Dr. Annie Backus, Aylmer; *Miss A. Morrison, 428 Euclid Ave., Toronto.

1	Beamsville, Reception Hall	Lincoln	May	27
2	Jordan Station, Victoria Hall	Lincoln	"	28
3	Queenston, The "Alexandria"	Lincoln	"	29
4	Allanburg, Town Hall	Welland (aft)	"	30
5	Willoughby, Town Hall	Welland (eve)	June	1
6	Bowen Road, School House	Welland (aft)	"	2
7	Ridgeway, Public Library	Welland (aft)	"	3
8	Sherkstone, Mrs. A. N. Sherk's	Welland	"	4
9	Winger, Church of Christ	Monck	"	5
10	Wellandport, Misener's Hall	Monck	"	6
11	Smithville, Morgan's Hall	Monck	"	8
12	Blackheath	South Wentworth (aft)	"	9
13	Binbrook	South Wentworth (aft)	"	10
14	Tapleytown	South Wentworth (aft)	"	11
15	Stoney Creek	South Wentworth (aft)	"	12
16	Winona	South Wentworth (aft)	"	13
17	Hannon	South Wentworth (aft)	"	15
18	Carluke	South Wentworth (aft)	"	16
19	Glanford	South Wentworth (eve)	"	16
20	Ancaster	South Wentworth (aft)	"	17
21	Jerseyville	South Wentworth (aft)	"	18
22	Caledonia	Haldimand (aft)	"	19
23	Hagersville, A. O. U. W. Hall	Haldimand	"	20

Division 2.—Continued.

24	Clan Brassil, Presbyterian Church	Haldimand (aft)	June	22
25	Decewsville, Town Hall	Haldimand (aft)	"	23
26	Jarvis, A. O. U. W. Hall	Haldimand	"	24
27	Nanticoke	Haldimand (aft)	"	25
28	Sandusk, Mrs. Werner's	Haldimand (aft)	"	26
29	Cheapside, C. O. F. Hall	Haldimand	"	27
30	Selkirk, A. O. U. W. Hall	Haldimand	"	29
31	Rainham Centre	Haldimand	"	30
32	South Cayuga, Methodist Church	Haldimand	July	2
33	Canfield, McDonald's Hall	Haldimand (aft)	"	3
34	Canboro	Haldimand	"	4
35	York, Methodist School Room	Haldimand	"	6

Division 3. *Miss B. Duncan, Emery; Mrs. M. Rutnam, M.D., Clinton.

1	Arthur	East Wellington	May	28
2	Damascus	East Wellington	"	29
3	Kenilworth	East Wellington	"	30
4	Conn	East Wellington	June	1
5	Cedarville	East Wellington	"	2
6	Mount Forest	East Wellington	"	3
7	Grand Valley	East Wellington	"	4
8	Laurel	Dufferin	"	5
9	Whittington, Methodist Church	Dufferin	"	6
10	Camilla, Harshall's Hall	Dufferin	"	8
11	Orangeville, Methodist Church	Dufferin	"	9
12	Blount, Hall	Dufferin	"	10
13	Corbetton, Orange Hall	Dufferin (eve)	"	11
14	Shelburne, Town Hall	Dufferin	"	12
15	Horning's Mills, Church	Dufferin	"	13
16	Honeywood, Hall	Dufferin	"	15
17	Creemore, May's Hall	West Simcoe	"	16
18	Avening	West Simcoe	"	17
19	Everett, Orange Hall	West Simcoe	"	18
20	Duntroon, Bridge's Hall	West Simcoe	"	19
21	Singhampton, Grant's Hall	West Simcoe	"	20
22	Batteau, Public School	West Simcoe	"	22
23	New Lowell, Town Hall	West Simcoe	"	23
24	Sunnidale Corners, Mill Hall	West Simcoe	"	24
25	New Flos, Mrs. Hisey's	Centre Simcoe	"	25
26	Russelton	Centre Simcoe	"	26
27	Minesing	Centre Simcoe	"	27
28	Midhurst, Patron's Hall	Centre Simcoe (aft)	"	29
29	Phelpston	Centre Simcoe	"	30
30	Allanwood	Centre Simcoe	July	1
31	Elmvale, Agricultural Hall	Centre Simcoe	"	2
32	Wyebridge, Public Hall	Centre Simcoe	"	3
33	Coldwater	East Simcoe	"	4
34	Orillia, Council Chamber	East Simcoe	"	6
35	Oro Station	East Simcoe	"	7
36	Churchill, Orange Hall	South Simcoe	"	8
37	Elm Grove	South Simcoe	"	9
38	Erin, A. O. U. W. Hall	Centre Wellington	"	10
39	Coningsby, School House	Centre Wellington	"	11
40	Everton	Centre Wellington	"	13

Division 5. *Miss Mary Bell, 86 Delaware Avenue, Buffalo, N. Y.; Miss B. Maddock, Guelph, May 27th, to June 4th; Mrs. M. L. Ashley, Londesboro, June 5th to July 11th.

1	Glen Allan, Knox Church Basement	West Wellington (aft)	May	27
2	Drayton, Council Chamber	West Wellington (aft)	"	28
3	Moorefield, Innes Hall	West Wellington (aft)	"	29
4	Rothsay, Temperance Hall	West Wellington (aft)	"	30
5	Palmerston, Anderson's Hall	West Wellington (aft)	June	1
6	Harriston, Town Hall	Union	"	2
7	Clifford, Oddfellows' Hall	Union	"	3
8	Drew Station	Union	"	4
9	Elmwood, Wildfang's Hall	South Grey	"	5
10	Hanover, Miller's Hall	South Grey	"	6

Division 5.—Continued.

11	Ayton, School House	South Grey (aft)	June	8
12	Durham, Town Hall	South Grey (aft)	"	9
13	Holstein, Robert's Hall	South Grey (aft)	"	10
14	Dromore	South Grey	"	11
15	Priceville	Centre Grey	"	12
16	Flesherton, Town Hall	Centre Grey	"	13
17	Hopeville, McArdle's Hall	Centre Grey	"	15
18	Dundalk	Centre Grey	"	16
19	Badgeros, School House	Centre Grey	"	17
20	Feversham, Maxwell Meth. Hall for P. M., Orange Hall for evening meeting	Centre Grey	"	18
21	Vandeleur, Foresters' Hall	Centre Grey	"	19
22	Kimberley, Orange Hall for P. M. meeting, Public Hall for evening meeting	Centre Grey	"	20
23	Ravenna, Town Hall	Centre Grey	"	22
24	Heathcote, Orange Hall	Centre Grey	"	23
25	Temple Hill, Presbyterian Church	Centre Grey	"	2
26	Walter's Falls	Centre Grey	"	24
27	Williamsford, Hall	Centre Grey	"	25
28	Chatsworth, Mrs. T. H. Collins	North Grey (aft)	"	26
29	Desboro, Township Hall	North Grey	"	27
30	Kilsyth, Township Hall	North Grey	"	39
31	Brookholm, Presbyterian Church Basement	North Grey (aft)	July	0
32	Woodford, Lemon's Hall	North Grey	"	2
33	Meaford, Council Chamber	North Grey	"	3
34	Annan, Church Basement	North Grey	"	4
35	Kemble, Library Hall	North Grey (aft)	"	6
36	Clavering, Brown's School House No. 3	North Grey	"	7
37	Hepworth, No. 6 School House	North Bruce	"	8
38	Wiarton	North Bruce	"	19
39	Lion's Head, Town Hall	North Bruce (aft)	"	10

1

Division 6. Miss L. Rose, Guelph; *Miss Clara E. Elliott, 314 McNab Street, Hamilton.

1	Princeton, Swartz's Hall	North Oxford	May	27
2	Drumbo, Town Hall	North Oxford (aft)	"	28
3	Bright, Presbyterian Church	North Oxford	"	29
4	Plattsville	North Oxford (aft)	"	30
5	Innerkip, Foresters' Hall	North Oxford (aft)	June	1
6	Cassell, Mrs. Ed. Pearson's	North Oxford (aft)	"	2
7	Hickson, Township Hall	North Oxford (eve)	"	2
8	Braemar, Hall	North Oxford	"	3
9	Embro, Cooper's Hall	North Oxford (aft)	"	4
10	Thamesford, Mrs. G. A. Hogg's	North Oxford	"	5
11	Kintore, Company Hall	North Oxford	"	6
12	Beachville, Library Hall	South Oxford (aft)	"	8
13	Folden's Corners, Town Hall	South Oxford (aft)	"	9
14	Mount Elgin, Foresters' Hall	South Oxford	"	10
15	Tillsonburg	South Oxford	"	11
16	Brownsville, Baptist Church	South Oxford (aft)	"	12
17	Springford, Town Hall	South Oxford	"	13
18	Norwich, Presbyterian Church	South Oxford (aft)	"	15
19	Burgessville, Mrs. And. Cohoe's	South Oxford (aft)	"	16
20	Currie's Crossing, Methodist Church	South Oxford (aft)	"	17
21	Tavistock, Society Hall	South Perth (aft)	"	18
22	Fullarton, Town Hall	South Perth (aft)	"	19
23	Sebringville	South Perth	"	20
24	Hampstead	North Perth	"	22
25	Milverton	North Perth	"	23
26	Millbank	North Perth	"	24
27	Listowel	North Perth	"	25
28	Fordwich, Forester's Hall	East Huron	"	26
29	Molesworth, Orange Hall	East Huron	"	27
30	Etbel, Township Hall	East Huron	"	29
31	Walton	East Huron	"	30
32	St. Columban	East Huron	July	1
33	Benmiller, School House	West Huron	"	2
34	Holmesville, Mrs. Mulholland's	West Huron (aft)	"	3
35	Clinton	West Huron	"	4

Division 6.—Continued.

36	Wingham, C. O. F. Hall	West Huron	July	6
37	St. Helens	West Huron	"	7
38	Kincardine, Council Chamber	Centre Bruce (aft)	"	8
39	Ripley	Centre Bruce	"	9
40	Lucknow	South Bruce	"	10
41	Teeswater	South Bruce (aft)	"	11
42	Walkerton	South Bruce (aft)	"	13
43	Paisley, Town Hall	Centre Bruce	"	14
44	Port Elgin, Council Chamber	West Bruce	"	15
45	Arkwright	West Bruce	"	16
46	Tara, Council Chamber	West Bruce	"	17
47	Allenford, Orange Hall	West Bruce	"	18

Division 7. Miss B. Millar, Guelph ; Mrs. M. L. Ashley, Londesboro, May 27th to 30th ; Mrs. M. McC. Allen, Oswego, N. Y., June 1st to July 8th.

1	Wellesley, Town Hall	North Waterloo	May	27
2	Linwood	North Waterloo	"	28
3	Hawkesville, Ballard's Hall	North Waterloo	"	29
4	Heidelburg, O. J. Steiss'	North Waterloo	"	30
5	St. Jacobs	North Waterloo	June	1
6	Conestogo, Township Hall	North Waterloo (aft)	"	2
7	Winterbourne, St. Andrew's Hall	North Waterloo (aft)	"	3
8	West Montrose	North Waterloo	"	4
9	Floradale	North Waterloo	"	5
10	Rockwood, Friends' Hall	South Wellington (aft)	"	6
11	Eden Mills	South Wellington	"	8
12	Marden, Mrs. Wm. Cowan's	South Wellington (aft)	"	9
13	Aberfoyle, Hall	South Wellington	"	10
14	Paisley Block, School House	South Wellington (eve)	"	11
15	Galt, Mrs. Ed. Getty's	South Waterloo (aft)	"	12
16	Hespeler, Mrs. Thos. Shaw's	South Waterloo (aft)	"	13
17	Branchton, Forester's Hall	South Waterloo (aft)	"	15
18	New Dundee, Hall	South Waterloo	"	16
19	Roseville	South Waterloo (aft)	"	17
20	Ayr, Reid's Hall	South Waterloo (eve)	"	17
21	Streetsville, Oddfellows' Hall	Peel (aft)	"	18
22	Clarkson	Peel	"	19
23	Malton	Peel (aft)	"	20
24	Tullamore, Church Hall	Peel (aft)	"	22
25	Cheltenham, Mrs. E. W. Wilkinson	Peel (aft)	"	23
26	Inglewood, Town Hall	Peel	"	24
27	Belfountain, Church	Peel	"	25
28	Alton, Science Hall	Peel	"	26
29	Caledon, Hall	Peel (aft)	"	27
30	Mono Road, Foresters' Hall	Peel (aft)	"	29
31	Mono Mills, Church of England Hall	Peel	"	30
32	Bolton, Council Chamber	Peel (aft)	July	1
33	Nobleton, Methodist Church Basement	North York (aft)	"	2
34	Kettleby	North York (aft)	"	3
35	Vandorf, Mechanics' Hall	North York (aft)	"	4
36	Newmarket, Mrs. Bales'	North York (aft)	"	6
37	Queensville	North York (aft)	"	7
38	Mount Albert, Mrs. H. L. Ramsden's	North York (aft)	"	8

Division 8. Dr. Annie Backus, Aylmer, May 14th, to May 21st ; *Miss B. Duncan, Emery, May 14th to May 21st ; Miss S. Campbell, Brampton, May 27th to July 10th ; *Mrs. Colin Campbell, Windsor, May 27th to June 4th ; *Miss N. B. Hall, Lindsay, June 5th to July 10th.

1	Springfield, Stewart's Hall	East Elgin	May	14
2	Mapleton, Mrs. Cline's	East Elgin (aft)	"	15
3	Bayham, Methodist Church	East Elgin (aft)	"	16
4	Eden	East Elgin (aft)	"	18
5	Port Burwell, Court House	East Elgin	"	19
6	Sparta, Temperance Hall	East Elgin (aft)	"	20
7	Aylmer, Town Hall	East Elgin	"	21
8	Harrietsville, Oddfellows' Hall	East Middlesex (aft)	"	27
9	Dutton, Town Hall	West Elgin	"	28
10	Rodney, Opera House	West Elgin	"	29
11	Highgate, Methodist Church Basement	East Kent	"	30

Division 8.—Continued.

12	Morpeth	East Kent	June	1
13	Cedar Springs, Foresters' Hall	West Kent	"	2
14	Valetta, Union Hall	West Kent	"	3
15	Port Alma, D. H. Brown's	West Kent (aft)	"	4
16	Wheatley, Gibson's Hall	West Kent	"	5
17	Leamington, Town Hall	South Essex	"	6
18	Kingsville	South Essex	"	8
19	Harrow	South Essex	"	9
20	Oldcastle, Town Hall, Sandwich S.	North Essex	"	10
21	Maidstone, R. C. Hall	North Essex (aft)	"	11
22	Essex, Town Hall	North Essex (eve)	"	11
23	South Woodslee, Mitchell's Hall	North Essex	"	12
24	Comber, McAllister's Hall	North Essex	"	13
25	Tilbury, Presbyterian Church	West Kent	"	15
26	Irwin, Union Hall	West Kent	"	16
27	Kent Bridge, Methodist Church Basement	East Kent	"	17
28	Thamesville	East Kent	"	18
29	Appin, Town Hall	West Middlesex	"	19
30	Napier, Town Hall	West Middlesex	"	20
31	Strathroy, St. John's Hall	West Middlesex	"	22
32	Thorndale, Harding Hall	East Middlesex	"	23
33	Lobo, Masonic Hall	North Middlesex	"	24
34	Coldstream, Town Hall	North Middlesex	"	25
35	Beechwood, Hall	North Middlesex	"	26
36	Parkhill, Town Hall	North Middlesex	"	27
37	Ailsa Craig, Town Hall	North Middlesex	"	29
38	Mooresville	North Middlesex	"	30
39	West McGillivray, Town Hall	North Middlesex	July	2
40	Sylvan, School House	North Middlesex	"	3
41	Forest, Town Hall	East Lambton (aft)	"	4
42	Wyoming, Oddfellows' Hall	East Lambton	"	6
43	Osborne, School House	West Lambton (aft)	"	7
44	Bridgen, Nixon's Hall	West Lambton (aft)	"	8
45	Oil Springs, Methodist Church	West Lambton	"	9
46	Shetland, Hall	East Lambton (aft)	"	10

Division 9. Miss G. Gray, 650 Bathurst Street, Toronto ; *Miss H. McMurchie, Harriston.

1	Mimico, "Ormscliffe"	West York (aft)	May	28
2	Lambton Mills, Mrs. S. Bryon's	West York (aft)	"	29
3	Toronto Junction, College of Music	West York (aft)	"	30
4	Weston, Dufferin Hall	West York (aft)	June	1
5	Thistleton, Mrs. Jas. Kingdom's	West York (aft)	"	2
6	Woodbridge, Orange Hall	West York	"	3
7	Kleinburg, Mrs. E. Bray's	West York	"	4
8	Maple, Masonic Hall	West York (aft)	"	5
9	Elia, Foresters' Hall	West York	"	6
10	Fairbank, School House	West York	"	8
11	Thornhill, Mrs. R. Chapman's	East York	"	9
12	Highland Creek	East York	"	10
13	Agincourt, Mrs. J. Elliott's	East York	"	11
14	Victoria Square, Mrs. Thos. Frisby's	East York	"	12
15	Box Grove, Mrs. Wm. Clark's	East York (aft)	"	13
16	Stouffville, Council Chamber	East York (aft)	"	15
17	Cambray	West Victoria	"	16
18	Hartley	West Victoria	"	17
19	Islay	West Victoria	"	18
20	Little Britain, Temperance Hall	West Victoria	"	19
21	Oakwood, Institute Hall	West Victoria	"	20
22	Linden Valley	West Victoria	"	22
23	Burnt River, Orange Hall	East Victoria	"	23
24	Fenelen Falls, Dickson's Hall	East Victoria	"	24
25	Bobcaygeon, True Blue Hall	East Victoria	"	25
26	Omemee, McGaffray's Hall	East Victoria	"	26
27	Lindsay, Council Hall	West Victoria	"	27
28	Parkersville, Mrs. Jno. Newson's	Centre Muskoka (aft)	"	29
29	Allansville, Union Hall	Centre Muskoka (aft)	"	30
30	Ufford	Centre Muskoka (aft)	July	1
31	Brackenrig, School House	South Muskoka (aft)	"	2

Division 9.—Continued.

32	Bardsville, Mrs. S. Austin's	South Muskoka (aft)	July	3
33	Bracebridge, Mrs. W. C. Dennis'	South Muskoka (aft)	"	4
34	Baysville, Town Hall	South Muskoka (aft)	"	6
35	Muskoka Falls, School House	South Muskoka	"	7
36	Germania, School House	South Muskoka	"	8
37	Reay, Hall	South Muskoka (aft)	"	9

Division 10. Miss M. Yates, Box 191, G.P.O., Toronto; *Mrs. J. W. Bates, Broad Ripple, Ind., May 28th to June 8th; *Miss I. Hyland, 72 Mary Street, Toronto, June 9th to July 6th.

1	Pickering	South Ontario	May	28
2	Whitby, Council Chamber	South Ontario (aft)	"	29
3	Kinsale, Hall	South Ontario	"	30
4	Columbus, School House	South Ontario (aft)	June	1
5	Newtonville, School House	West Durham (aft)	"	2
6	Garden Hill, Temperance Hall	East Durham	"	3
7	Mount Pleasant, Temperance Hall	East Durham	"	4
8	Springville, Sunday School Room	East Durham (aft)	"	5
9	Millbrook, Town Hall	East Durham	"	6
10	Bailieboro, Hall	East Durham (aft)	"	8
11	Hagerman's Corners, Bissell's S.H.	West Northumberland (aft)	"	9
12	Gore's Landing, Public Library	West Northumberland (eve)	"	10
13	Fenella, Temperance Hall	West Northumberland	"	11
14	Roseneath, Town Hall	West Northumberland	"	12
15	Castleton, Town Hall	East Northumberland (aft)	"	13
16	Brighton, Town Hall Hilton	East Northumberland (aft)	"	15
17	Smithfield, Church	East Northumberland	"	16
18	Wooler, Methodist Church	East Northumberland (aft)	"	17
19	Hoyle's School House	West Hastings (aft)	"	18
20	Wallbridge	West Hastings (aft)	"	19
21	Frankford, Forester's Hall	West Hastings (aft)	"	20
22	Turner's	West Hastings (aft)	"	22
23	Clazie's School House	East Hastings	"	23
24	Melrose, Town Hall	East Hastings	"	24
25	Foxboro, Methodist School Room	East Hastings	"	25
26	Tweed, Robertsons' Hall	East Hastings	"	26
27	Queensboro	North Hastings (aft)	"	27
28	Eldorado, Town Hall	North Hastings	"	29
29	Wellman's Corners, Orange Hall	North Hastings	"	30
30	Springbrook, Orange Hall	North Hastings	July	1
31	Warsaw	East Peterboro	"	2
32	Lakefield, Foresters' Hall	West Peterboro	"	3
33	Ennismore, St. Martin's T. A. S.	West Peterboro	"	4
34	Uxbridge	North Ontario	"	6

Division 11. Miss Isobel Rife, Hespeler; *Miss N. B Hall, Lindsay, May 27 to June 2; *Miss J. A. McIntyre, Riverside, N. B., June 4 to July 6.

1	Tyrrell, Town Hall	North Norfolk	May	27
2	Simcoe, Baptist School Room	North Norfolk	"	28
3	Delhi, (Pic-nic in Grove)	North Norfolk (aft)	"	29
4	Courtland, Town Hall	North Norfolk	"	30
5	Guysboro	North Norfolk	June	1
6	Windham Centre, Town Hall	North Norfolk (aft)	"	2
7	Picton, Lecture Room, First Meth. Ch.	Prince Edward	"	4
8	Bloomfield	Prince Edward	"	5
9	Wellington	Prince Edward	"	6
10	Gilberts Mills	Prince Edward	"	8
11	West Lake, Mrs. J. W. Hyatt's in P. M., School House in evening	Prince Edward	"	9
12	Cherry Valley, Town Hall	Prince Edward (aft)	"	10
13	Milford, Town Hall	Prince Edward	"	11
14	Adolphustown, Town Hall	Lennox	"	12
15	Stella	Amherst Island	"	13
16	Morrisburg	Dundas	"	16
17	Brinston's Corners, Gibson's Hall	Dundas	"	17
18	Inkerman	Dundas	"	18
19	Chesterville, Town Hall	Dundas	"	19
20	Morewood, Foresters' Hall	Dundas	"	20

Division 11.—Continued.

21	Russell, Town Hall	Russell (eve)	June	22
22	Manitock	Carleton	"	23
23	North Gower, Mrs. R. A. Craig's in P. M., Town Hall in evening	Carleton	"	24
24	Stittsville	Carleton	"	25
25	Fitzroy Harbor	Carleton	"	26
26	Douglas, Bromley Temperance Hall	North Renfrew (eve)	"	27
27	Forester's Falls, Town Hall	North Renfrew (eve)	"	29
28	Westmeath, Town Hall	North Renfrew (eve)	"	30
29	Beachburg, Town Hall	North Renfrew (eve)	July	2
30	Scotland	North Renfrew	"	3
31	Micksburg	North Renfrew	"	4
32	Perth	South Lanark	"	6
33	Lanark	North Lanark	"	7

NORTHERN SERIES OF FARMERS' AND WOMEN'S INSTITUTE MEETINGS, 1908.

Division 12. Mr. George Carlaw, Warkworth.

Mr. Carlaw is an Associate of the Agricultural College, and since graduation has put into practice the knowledge acquired at the College and by wide reading since that time. Mr. Carlaw is a successful practical dairyman, and is well qualified to give valuable instruction and timely advice to the farmers of the northern districts. His experience as an Institute lecturer and a local Institute officer add to his qualifications as a delegate.

Subjects: "Selection and Feeding of Dairy Herds," "Cultivation of the Soil and Eradication of Weeds," "Soiling Crops for the Farmer," "The Home Dairy," "Agricultural Education."

Mrs. Jno. Bates, Broad Ripple, Ind.

1	Emsdale, Agricultural Hall	East Parry Sound	June	11
2	Doe Lake, School House	East Parry Sound	"	12
3	Midlothian, School House	East Parry Sound	"	13
4	Magnetawan, Orange Hall	East Parry Sound (aft)	"	15
5	Burk's Falls, Sharp's Hall	East Parry Sound	"	16
6	Sundridge, Orange Hall	East Parry Sound	"	17
7	South River, Vincent's Hall	East Parry Sound	"	18
8	Trout Creek, Trussler's Hall	East Parry Sound	"	19
9	Granite Hill, School House	East Parry Sound	"	20
10	Golden Valley, School House	East Parry Sound	"	22
11	Arnstein, School House	East Parry Sound	"	23
12	Loring, Russell Hall	East Parry Sound	"	24
13	Restoule, School House	East Parry Sound	"	25
14	Nipissing, School House	East Parry Sound	"	26
15	Powassan, Stewart's Hall	East Parry Sound	"	27
16	New Liskeard, Orange Hall	Temiskaming	"	29
17	Hillview, School House	Temiskaming	"	30
18	Milberta, Newton's Hall	Temiskaming	July	2
19	Uno Park, School House	Temiskaming	"	3
20	Hanbury, School House	Temiskamirg	"	4
21	Thornloe	Temiskaming	"	6
22	Earlton, School House	Temiskaming	"	7
23	Heaslip, School House	Temiskaming	"	8
24	Englehart	Temiskaming	"	9
25	Charlton	Temiskaming	"	10
26	Tomstown	Temiskaming	"	11
27	Hilliardton, School House	Temiskaming	"	13
28	Judge, School House	Temiskaming	"	14
29	Haileybury, Orange Hall	Temiskaming	"	15

Division 13. Andrew Elliott, Galt.

Mr. Elliott is a successful practical farmer, who has always been a close student, and who has had the advantage of doing Institute work in many of the Provinces of the Dominion, and in several of the States of the Union. Mr. Elliott brings practical experience, enthusiasm, perseverance and tact into his Institute work. His knowledge and experience should make him of special value as an Institute worker to the farmers of northern Ontario.

Subjects: "Building up of Soils, and Retention of Fertility," "Clover and Root Crops," "Live Stock for the Northern Farmers," "Dairying," "Pure Seeds," The Judging of Beef Cattle, Dairy Cattle, Sheep, Hogs and Heavy Horses.

Miss Blanche Maddock, Guelph, Ont.

1	Grimesthorpe, School House	West Manitoulin	June	10
2	Billings, No. 2 School House	West Manitoulin	"	11
3	Gordon's School House, No. 4	West Manitoulin	"	12
4	Barrie Island, School House	West Manitoulin	"	13
5	Poplar, School House	West Manitoulin	"	15
6	Silver Water, Foresters' Hall	West Manitoulin	"	16
7	Marksville, Town Hall	St. Joseph Island	"	19
8	Kaskawan, School House (aft.)	St. Joseph Island	"	20
9	Stone School House (eve.)	St. Joseph Island	"	20
10	Carterton, Town Hall	St. Joseph Island	"	22
11	Kentvale, Orange Hall	St. Joseph Island	"	23
12	Richard's Landing, Town Hall	St. Joseph Island	"	24
13	Little Rapids, School House	East Algoma	"	26
14	Alma Heights, School House	East Algoma	"	27
15	Livingstone's Creek, School House	East Algoma	"	29
16	Sowerby, Maccabee's Hall	East Algoma	"	30
17	Goldenburg, School House	East Algoma	July	1
18	Iron Bridge, Orange Hall	East Algoma	"	2
19	Wallford	East Algoma	"	3
20	Warren, Orange Hall	West Nipissing	"	4
21	Verner, School House	West Nipissing	"	6
22	Sturgeon Falls	West Nipissing	"	7
23	Four Mile Lake (aft.)	West Nipissing	"	8
24	Widdifield Hall (eve.)	West Nipissing	"	8
25	Woodlands, School House	West Nipissing	"	9

Division 14. W. F. Kydd, Simcoe, Ont. :—

Mr. Kydd has had wide experience in general farming, and has specialized in dairying and small fruits. He is looked upon as one of the best judges of both heavy and light horses and dairy cattle, and his experience as a judge at fall fairs and Institute work places him in a position to render excellent service along lines indicated in the subjects given below. Mr. Kydd will be able to conduct judging classes on heavy and light horses and dairy cattle.

Subjects: "Horses for the Northern Country," "The Dairy Cow—Her Summer Feed and Winter Care," "Cultivation of the Soil," "Growing of Potatoes," "The Farmer's Fruit and Vegetable Garden," "Dropped Stitches."

Mrs. C. Campbell, Windsor.

1	Nolalu	Thunder Bay	June	16
2	Hymers, Orange Hall	Thunder Bay	"	17
3	O'Connor, School House No. 1	Thunder Bay	"	18
4	Stanley, School House No. 2	Thunder Bay	"	19
5	Paipoonge, School House No. 1	Thunder Bay	"	20
6	Wolf River, Baptist Church	Thunder Bay	"	22
7	Dorion, School House No. 2	Thunder Bay	"	23
8	Murillo, Town Hall	Thunder Bay	"	24
9	Dryden, Hutchison's Hall	Wabigoon	"	25
10	Minnitaki, P. O. Billing	Wabigoon	"	26
11	Oxdrift, School House	Wabigoon	"	27
12	Eagle River, Town Hall	Wabigoon	"	29
13		Wabigoon	"	30
14	Rainy River, Robert's Hall	Rainy River	July	3
15	Sleeman, A. J. Hunter's	Rainy River	"	4
16	Stratton, Foresters' Hall	Rainy River	"	6
17	Klondike, McKenzie's School House	Rainy River	"	7
18	Barwick, Weston's Hall	Rainy River	"	8
19	Emo, McEachren's Hall (annual)	Rainy River	"	9
20	Devlin, Foresters' Hall	Rainy River	"	10
21	Crozier, School House	Rainy River	"	11
22	Fort Francis, Town Hall	Rainy River	"	13
23	Isherwood, School House	Rainy River (aft)	"	14

Division 15. Speaker has not been procured in time for publication. Name and subjects will be announced by correspondence, to the Institutes concerned.

Miss B. Gilholm, Bright.

1	*Little Current	East Manitoulin	June	10
2	Green Bay, School House	East Manitoulin	"	11
3	*Sheguindah, School House	East Manitoulin	"	12
4	Manitowaning, Agric. Hall	East Manitoulin	"	13
5	Wikwemikong, Council Chamber (aft.)	East Manitoulin	"	15
6	Hilly Grove, School House	East Manitoulin	"	16
7	The Slash, School House	East Manitoulin	"	17
8	*South Bay, School House	East Manitoulin	"	18
9	Tehkummah, School House	East Manitoulin	"	19
10	Big Lake	East Manitoulin	"	20
11	Mindemoya, School House	East Manitoulin	"	22
12	Gordon Lake, Orange Hall	North Shore Algoma	"	24
13	Desbarats, Orange Hall	North Shore Algoma	"	25
14	McLennan, Maccabee Hall	North Shore Algoma	"	26
15	Bar River, Orange Hall	North Shore Algoma	"	27
16	Echo Bay, Orange Hall	North Shore Algoma	"	29
17	Tarantorus, School House	Centre Algoma	"	30
18	West Korah, School House	Centre Algoma	July	1
19	Bass Line, School House	Centre Algoma	"	2
20	Goulais Bay, School House	Centre Algoma	"	3
21	East Korah, School House	Centre Algoma	"	4
22	Ashworth, Stisted Township Hall	North Muskoka	"	7
23	Aspdin, Clifton Hall	North Muskoka	"	8
24	Ravenscliffe, Patron Hall	North Muskoka	"	9
25	Huntsville, Court House	North Muskoka	"	10
26	Brunel, No. 5 School House	North Muskoka	"	11
27	Birkendale, The Hemlock	North Muskoka	"	13
28	Hillside, School House	North Muskoka	"	14
29	Novar, Cowan's Hall	North Muskoka	"	15

Division 16. Henry Glendinning, Manilla.

Mr. Glendinning is a successful general farmer, and has specialized in dairying and the production of high class seeds. He has been particularly successful in the control of weeds and is an authority upon fodder crops. Mr. Glendinning's experience in Institute work in several of the Provinces of the Dominion and his close study of agricultural problems, places him in a position to be of special value to the farmers in the newer sections of the Province.

Subjects: "The Breeding and Feeding of Dairy Cattle," "Production of Hay and Clover," "Cultivation of the Soil," "The Destruction of Weeds and the Production of Good Seed," "Farm Conveniences."

Miss L. Shuttleworth, Guelph.

1	Milbridge	North Hastings	June	11
2	St. Ola	North Hastings	"	12
3	Coe Hill, School House	North Hastings	"	13
4	Lass Wade, School House	North Peterboro	"	15
5	South Burleigh, School House	North Peterboro	"	16
6	Apsley, Town Hall	North Peterboro	"	17
7	Clydesdale, School House	North Peterboro	"	18
8	L'Amable, Town Hall	North Hastings	"	19
9	Hermon, School House	North Hastings	"	20
10	Fort Stewart, Foresters' Hall	North Hastings	"	22
11	New Carlow, School House	North Hastings	"	23
12	Hybla, School House	North Hastings	"	24
13	Maynooth, Town Hall	North Hastings	"	25
14	Bancroft, Town Hall	North Hastings	"	26
15	Wood P. O., School House	North Hastings	"	27

Division 17. Dr. H. G. Reed, Georgetown.

Dr. Reed is not only a graduate in veterinary science, but has also the advantage of practical farm experience. He has been an acceptable delegate to many of the northern districts of Ontario and his close study of those sections render him particularly well qualified to instruct the farmers in the northern sections of Haliburton, Victoria and Peterboro. His demonstrations in the Judging of Live Stock (horses, dairy cattle and swine) are interesting and instructive.

Subjects: "Breeding, Caring and Feeding of Horses," "Live Stock Recommended for the Newer Sections of the Province," "Rotation of Crops and General Cultivation." "The Diseases of Domestic Animals and the Treatment thereof." Evening, "Training of the Young Horse."

Mrs. F. W. Watts, Clinton.

1	Deer Lake, No. 3 and 4 School House	Haliburton	June	11
2	Wilberforce	Haliburton	"	12
3	Tory Hill, School House	Haliburton	"	13
4	Gooderham, Orange Hall	Haliburton	"	15
5	Irondale, School House	Haliburton	"	16
6	Kinmount (a. m. and aft. only)	Haliburton	"	17
7	Haliburton, Town Hall	Haliburton	"	18
8	Minden, Town Hall	Haliburton	"	19
9	Coboconk, C.O.O.F. Hall	North Victoria	"	20
10	Norland, Foresters' Hall	North Victoria	"	22
11	Head Lake, Township Hall	North Victoria	"	23
12	Uphill	North Victoria	"	24
13	Dalrymple, Orange Hall	North Victoria	"	25
14	Kirkfield, McKenzie's Hall	North Victoria	"	26
15	Hall Bridge, School House	North Peterboro	"	27
16	Lakehurst, Town Hall	North Peterboro	"	29

Mrs. M. L. Ashley, of Londesboro, has for four years been Superintendent of a Maternity Hospital, during which time many diseases came under her care. She has had actual experience in the best methods of home management, and for years has taught and addressed large gatherings.

SUBJECTS: "Responsibilities of mothers to daughters, and vice versa."
"The feeding and care of infants."
"The sacredness of the body."
"Simple meals,—their refining influence."
"Sanitation and hygiene."
"Homemaking versus housekeeping."

Mrs. Mollie McC. Allen, of Oswego, N.Y., is a college bred woman who has for several years operated her own poultry farm. During the winter she addresses the Institutes in various States. She comes prepared to talk on "Poultry" and "Sanitation."

SUBJECTS: "Poultry keeping,—Hens and turkeys'."
"Gardening for women."
"Fruit growing and fruit for home use."
"The sanitary home."
"Sanitary milk."
"Proper feeding of young children."
"Tuberculosis from the farmers' standpoint."

Dr. Annie Backus of Aylmer brings her medical training and practice as well as her experience in country life and places them at the disposal of the women who hear her talks. She is pre-eminently practical, ready and willing to help womankind. Dr. Backus has been closely identified with Institute work throughout the Province, and especially in her own riding, for seven years.

SUBJECTS: "Hygiene of the home and aids in nursing."
"Consumption and its prevention."
"The importance and meaning of Woman's Work."
"Training in the home."
"Education of girls."
"Physical and mental harm in faultfinding."
"Poultry raising."

Miss Mary Bell, of Buffalo, N.Y., is a graduate in Domestic Science of the Oread Institute and has had two years' experience in Women's Institute work in Ontario. She has been engaged for the past year in teaching domestic science in the city of Buffalo. Her extended experience and the thorough preparation which she gives her work, enable her to render most acceptable service.

SUBJECTS: "Hints for home nursing,—Demonstrations in bandaging."
"Ventilation, sanitation, hygiene."
"Dietaries for different classes of people."
"Use and misuse of beverages."
"Men and women of the future."

Mrs. J. W. Bates, of Broad Ripple, Ind., has taken a keen interest in Women's Institute work for several seasons, and has rendered most acceptable service to many of the Institutes in Ontario. She is prepared to give valuable instruction not only along domestic science lines, but treats "Home Making" in a broad minded manner She has much valuable advice to give to mothers.

SUBJECTS: "Practical training for women."
"Home sewing."
"Short steps in kitchen work."
"Home making a fine art."
"Young people's institutes."
"Food Values."

Miss Gertrude Carter, of Guelph, graduated from the Guelph Dairy School and at once went into creamery work. She speaks well on dairy subjects and includes the not

less important subject of sewing. Miss Carter is now taking the course at the Macdonald Institute and can devote only two or three weeks to the work this season.

SUBJECTS: "Sewing." Demonstrated.
"Butter-making on the farm."
"Production and care of milk."
"Kitchens, past and present."
"Courtesy in the home."
"The sunny side of life."

The name of *Mrs. Colin Campbell, of Windsor*, has long been associated with Institute work; in fact she is a pioneer and with her opportunities for comparing the past with the present, and her knowledge and approciation of what the Women's Institutes have done for Ontario, she is ready to impart her enthusiasm, in addresses on practical home subjects.

SUBJECTS: "Canning fruits and vegetables."
"The care and uses of milk."
"The comparison of our common foods."
"Poultry raising,—Is it a profitable or losing business?"
"The housekeeper and her importance to the State."

Miss Susie Campbell, of Brampton, is one of those speakers who leave audiences enthusiastic in pursuing definite lines of work. She has a wide range of these subjects which are most needed by the woman and the girl on the farm. Her success in extending the organizations to all parts of Peel county has been most marked, and her advice to officers should prove of great value to them in furthering the interests of the Institutes.

SUBJECTS: "The ideal home."
"Character."
"A young lady's accomplishments."
"The influence of women."
"The judicious housekeeper and homemaker."
"Our fair Dominion."
"Demonstrations in needlework."

Miss B. Duncan, of Emery, has had scientific training in the Hamilton School of Domestic Science. This with her experience in country and city life to round out the application of her addresses, should gain for her an appreciative reception.

SUBJECTS: "Use of food to the body."
"Everyday helps for the housewife."
"Hints on selecting and caring for meats."
"Food values."
"Girls and their ideals."
"Country homes."

Miss L. Duncan, of Emery, has been markedly successful in extending the work of the Women's Institute in West York. Her suggestions to Institute officers, as to ways and means of interesting all classes and ages and in making the meetings most helpful, will be much appreciated.

SUBJECTS: "House Plants."
"Systematic Housework."
"Simple home decorations"
"Ways of arousing interest in civic improvement."
"Institute work,—Helpful hints to Institute officers."

Miss Clara Elliott, of Hamilton, who has been in charge of the Domestic Science Department of the Peterboro' Y. W. C. A. for the past three months, has had the advantage of a Macdonald Institute training, and is well qualified to talk on food subjects and demonstrate the same.

SUBJECTS: "Uses of food to the body."
"Bread,—wheat varieties, flour, yeast."
"Domestic Science."
"The house,—site, plan and care."
"Language and poetry of flowers."
"Famous women."

Miss B. Gilholm, of Bright, has the advantage of a Creamery Course at the Guelph Dairy School. She is a specialist in butter-making, holding diplomas for proficiency. We recommend her as one who loves country life and wishes to do her share in making it more ideal for every country woman and girl.

SUBJECTS: "Will the dairy cow remove the mortgage?"
"Care and handling of milk and cream by the producer and in transit."
"Our friends and foes—Bacteria."
"Institute work."
"Our Ain Fireside."

Miss M. Govenlock, of Sackville, N.B., is a graduate of the Lillian Massey School. After becoming a teacher in the same, she took charge of the Massey-Treble School in connection with Mount Allison College, Sackville. Miss Govenlock was an acceptable delegate at Women's Institutes two years ago. She is capable, practical and interesting in her talks and demonstrations.

SUBJECTS: "Kitchen Suggestions."
"Home products as food."
"Home nursing and food for the sick."
"Domestic economy."
"Harmony in home furnishings."

Miss G. Gray, of Toronto, is a Domestic Science Graduate and is regularly engaged in New York and Ontario Women's Institute work. She imparts knowledge in a clear, forceful and attractive manner.

SUBJECTS: "Chemistry of the household."
"Foods,—their use and preparation."
"Interior decoration of the home." (Illustrated).
"Science in the home."
"Life's Talisman."
"Our assets."

Miss M. Gray, of Toronto, has been on the Toronto Public School Staff for seven years. Previous to this she taught in the country schools and, with her experience in public work and speaking, she will have much of interest for her hearers.

SUBJECTS: "Mother and teacher."
"The mind as a storehouse."
"A praiseworthy ambition."
"Our investment of influence."

Miss N. B. Hall, of Lindsay, has not only had the advantage of a Domestic Science education, but is a school teacher of considerable experience and will be able to present her subjects in an attractive and forceful manner. Institute members will find much of value in her addresses and demonstrations.

SUBJECTS: "Sanitation and hygiene."
"Hints for the sick room,—Demonstrations in Bandaging."
"Talk on laundry work."
"Use of food to the body."

Miss Irene Hyland, of Toronto, has taken the full course in the Lillian Massey School of Domestic Science and is completing her Arts course in the University. Miss Hyland's experience in the management of the household, together with her scientific training, will enable her to render valuable service to the Institutes.

SUBJECTS: "Emergencies and Bandaging."
"Hygiene in the Home."
"Food Values." (Demonstrations in the afternoon).
"The Value of Fruit in our Diet."
"The Prevention and Treatment of Tuberculosis."

Miss J. A. McIntyre, of Riverside, N.B., after graduating from the Lillian Massey School, Toronto, spent several weeks in Women's Institute work in the summer of 1907. Her demonstrations and lectures were highly spoken of and the experience which she has had during the past year in College work will make her even more valuable in 1908.

SUBJECTS: "Dietetics in health and disease."
"Hints on home nursing; demonstration in bandaging."
"Food and its functions."
"Household science on the farm."

Miss Helen McMurchie, of Harriston, is a Macdonald Institute graduate. She understands domestic economy as applied to the country home and is highly appreciated as an Institute worker.

SUBJECTS: "Some hints on home dressmaking."
"The planning of a farm house." (Illustrated).
"Table setting and serving." (Illustrated).
"Books in the home."
"The value of pictures." (Illustrated).
"Food Values."

Miss Annie Morrison, of Toronto, is also a graduate of a School of Domestic Science and has been in touch with the Women's Institute which for two years she represented as delegate. With her practical household training she has made her addresses and demonstrations clear, practical and interesting.

SUBJECTS: "Bread and cake making."
"Millinery."
"Food values."
"Economies of the home."
"Pure food and its effect upon the nation."

Miss B. Millar, of Guelph, comes to us this year fresh from her experiences in New York State and with the Travelling Dairy School, Nova Scotia. Her dairy talks and her instruction *re* nursing are just what is demanded by the Women's Institute. Miss Millar is one of our most experienced and acceptable workers.

SUBJECTS: "Ten minute talks upon home nursing:—(*a*) The nurse and her duties; (*b*) The room and its care; (*c*) Little helps for patient and nurse; (*d*) The invalid's tray; (*e*) Beds and bed making; (*f*) Emergencies; (*g*) Bandaging—(*c*) and (*g*) demonstrated and illustrated."
"Home sanitation."
"Mistakes made in the dairy."
"As others see us."

Miss B. Maddock, of Guelph, understands the Institute work from its inception to the present time. With her Macdonald Institute training, she has a fund of useful information which is welcomed by her audiences. She has been particularly capable in enlisting the sympathies of the people and in getting them to work.

SUBJECTS: "Bread Making"
"Bacteria—their relation to health and disease."
"Different cuts of meat—their selection and preparation."
"Hygienic and economic values of food."
"Preserving and canning fruits and vegetables."
"A girl's possibilities."
"Our women's institutes and how to make them interesting."

Miss L. Reynolds, of Scarboro' Junction, has extended experience in the conducting of Women's Institutes, which places her in a position to give valuable advice in her lecturing tours. She is enthusiastic and her addresses are well received.

SUBJECTS: "Hygiene and sanitation."
"Foods,—their different constituents."
"Character building."
"Horticulture—(*a*) Vegetable growing; (*b*) Floriculture; (*c*) Landscape gardening."

Miss Isabel Rife, of Hespeler, brings her extensive public school experience as an asset into Women's Institute work. She is skilful in imparting instruction and in its application. Her lectures are practical and delivered in a pleasing manner. She is well qualified to advise officers as to the extension and operation of Institute work.

SUBJECTS: "Helpfulness in Women's Institutes."
"Sunshine, Pure Air and the Bath."
"Home treatment of consumption."
"Education of our young people."
"The home in its attitude to the school."

Miss Laura Rose, of Guelph, needs no introduction to the Women's Institutes of Ontario. Her ability as a public speaker and her wide knowledge of affairs place her

in a position to render the best services to the Institutes. She has charge of the Home Dairy Department at the Agricultural College, and has instructed many farmers' sons and daughters in the art of butter-making.

SUBJECTS: "How to increase dairy profits."
"Difficulties in butter-making, and how to overcome them."
"What milk is and how it should be cared for."
"The influence of environment."
"The head, the hand, the heart,—the tripod of successful work."
"A talk to housekeepers on housekeeping."
"The making of bread and buns."

Mrs. M. Rutnam, M.D., of Clinton, comes to this field of work with the rich experience gleaned from home and foreign practice. She graduated from Trinity in '96, took a Post Graduate Course in New York and went to Ceylon. With travel and actual work, her advice promises to be not only practical, but fascinating.

SUBJECTS: "Sanitation and health."
"The law and gospel of heredity."
"Young women,—the hope of the future."
"Temperance—Scientifically considered."
"Emergencies and Bandaging."
"Housekeeping versus home-making."
"The power of habit in the formation of character."

Mrs. J. H. Shaw, of Hespeler, has been an enthusiastic worker in the Women's Institutes of S. Waterloo Her practical experience and tact insure addresses of value and interest.

SUBJECTS: "Beneficial Suggestions to Branch Institutes."
"A talk on the Institute motto."
"Work."

Miss L. Shuttleworth, of Guelph, has had broad experience in household management and in dairy work, and these with her clear insight into her subjects, qualify her as an Institute speaker of great resource, and place her in a position to be of special service to Institute members. She has given instruction in dairy school and travelling dairies in Ontario and Nova Scotia, and has acted as judge at the Toronto Exhibition, as well as other fairs.

SUBJECTS: "Cool dishes for summer use."
"Fruits—methods of canning, preserving, etc."
"Health as a basis of womanly beauty."
"Short talks and discussion on cream separators, dairy utensils and their care, churning, care of milk and cream.
"The needs of the dairy industry."
"Evenings at the Homestead."

Mrs. F. W. Watts, of Clinton, has proved herself an efficient officer as district secretary of the West Huron Women's Institute. She has had some experience in Institute work and uses great care in the preparation of her subject matter, and her services should prove acceptable to the Institutes visited.

SUBJECTS: "Home nursing."
"The bath, fresh air and exercise."
"What mothers should know and remember."
"The benefits of Women's Institutes."
"Happiness in the home."

Miss Mary Yates, of Terrington Farm, Toronto, lends to her lectures the charm of the English gentlewoman. She is a certified poultry expert, a late instructor at Studley Agricultural College, Warwickshire, Eng., and is at present business manager of a poultry farm. Her services at the Poultry Institutes conducted by the Department last winter were much appreciated. The Women's Institutes are indeed very fortunate in having an opportunity to hear so competent a lecturer.

SUBJECTS: "The management of poultry," under eight different addresses. Demonstrations in plucking and shaping; grading and packing; trussing for boiling and roasting.
"Home Economies."
"Our servants—earth, air, fire and water, and how to use them in the home."
"Method in farm records and correspondence."

REPORT

OF THE

FARMERS' INSTITUTES

OF THE

PROVINCE OF ONTARIO

1908

PART I.—FARMERS' INSTITUTES

(PUBLISHED BY THE ONTARIO DEPARTMENT OF AGRICULTURE, TORONTO)

PRINTED BY ORDER OF
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TORONTO.

To the Honourable JOHN MORISON GIBSON, K.C., LL.D., etc., etc., etc.,

Lieutenant-Governor of the Province of Ontario.

May it Please Your Honour:

I have the pleasure to present herewith for the consideration of your Honour the Report of the Farmers' Institutes of Ontario for 1908.

Respectfully submitted,

JAMES S. DUFF,

Minister of Agriculture.

Toronto, 1909.

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Farmers' Institutes of Ontario

1908

To the Hon. Minister of Agriculture:

I have the honor to present herewith the fourteenth annual report of the Superintendent of Farmers' Institutes. This report is published in two parts: Part I., this volume, and Part II., list of meetings, speakers and their subjects, statistics, etc.

It will be of interest and encouraging to Institute members to know that the attendance at Regular and Supplemenary Institute meetings during the winter 1908-'09 was 11,000 greater than the previous year. In addition to this regular Institute work, a great may special Institutes,—seed and live stock judging classes, fruit Institutes, poultry Institutes, special dairy meetings, etc.,—were held in those sections where the best opportunities were afforded for work of this kind. The work of the Woman's Institute has greatly extended during the year 1908-09, the 525 branches holding 4,625 meetings with an attendance of 116,493. The attendance at all meetings under the direction of the Institute Branch during 1908-'09 was over 286,000.

Copies of the following reports: Agricultural College, Live Stock Associations, Dairymen's Associations, Agricultural and Experimental Union, most of the bulletins issued by the Department of Agriculture, as well as this volume, are sent to all members of the Farmers' Institutes of the Province. It is not necessary, therefore, that Part I, Farmers' Institute Report, should cover a very broad field, as topics of general interest and value to the farmers are contained in the other reports sent to Farmers' Institute members. We believe, however, that every farmer will be interested in and benefited by many of the articles appearing herein.

We beg, especially to call the attention of our readers to the information and suggestions given regarding Farmers' Institute clubs. We are fully convinced that there is no more effective method through which Agricultural conditions can be improved than by the farmers in each locality holding meetings on their own account from month to month throughout the fall and winter seasons.

We desire again to urge upon Institute members and others who get literature from the Department the necessity for keeping permanent files of the report sent out. By using these publications for reference purposes they can be made of permanent value, and the necessity for large quantities of literature from year to year would not be so great. In view of the fact, however, that a number of new members of Farmers' Institutes are secured each year, more or less repetition is necessary in each set of reports, if the new members are to be well served.

There are over 175,000 farm homes in the Province of Ontario, but only about 21,000 to 22,000 take advantage of Membership in the Farmers' Institute, which costs only twenty-five cents a year. This fee secures a full set of the literature sent to members. Is it not worth while for the average farmer to make a study of his business to the extent of knowing

something as to the methods of successful practical men and the result of experimental work conducted by men specially qualified for the purpose? The improved methods in Agricultural practices in Ontario during the past twenty years are the result largely of the lessons taught through the literature published by the Department of Agriculture, the lectures given at Institute meetings, and the agricultural press.

In the selection of seed, the rotation of crops, the selection, breeding and feeding of live stock, in improved methods of fruit culture, and in practically all branches of agriculture, we can record gradual progress, and we believe that the Institutes can render even a greater service in the years to come. This, however, calls for an effort on the part of the farmers in each locality to get the greatest good out of the Institute meetings and lectures. Do not allow an Institute session to pass without discussing the subjects taken up in the light of local conditions and practices. An Institute meeting is usually beneficial in proportion to the extent of the discussion on the part of the farmers in attendance. Do not fail to examine carefully each report and bulletin received. Every farmer will usually find some suggestion or definite information of value to him in his practical work.

GEORGE A. PUTNAM,
Superintendent

Parliament Buildings,
Toronto, 1909.

FARMERS' INSTITUTES OF ONTARIO.

FARMERS' INSTITUTE CLUBS.

In the appendix to the Farmers' Institutes Annual Report for 1908, an outline was given of the constitution, by-laws and methods of procedure of the Farmers' Clubs of the Province. The object of this appendix was to expand and widen the scope of these institutions and to introduce them into sections where they had not hitherto existed. It is gratifying to note that since the pubilcation of this appendix, the number and extent of these Clubs has very materially increased. The officers and directors of the Farmers' Institutes have been supplied with copies of the report and the Institute speakers have been asked to bring the Club movement before the meetings they address and to give full information on any point connected with the methods and objects of the Farmers' Institute Clubs. The results of Club work have been so gratifying and the possibilities for further development are so promising that we deem it advisable to bring the matter to the attention of all farmers who belong to the Farmers' Institute.

Much good is being done by the District Representatives in organizing clubs in new localities and stimulating interest in those places where Clubs previously existed. But it is not only through the work of these representatives that the Club movement has made progress. Prominent and progressive farmers in some localities have organized without outside assistance of any kind. They appreciated the power for good within such an organization and used their influence to secure the co-operation of neighbors in forming local societies. Some of these Clubs are among the most successful. In a few localities Clubs were established many years ago, even before Farmers' Institutes were organized and the farmers connected with these Clubs in their younger days can now be counted among the most successful farmers of the Province. They realized the advantages to be gained through more frequent intercourse with their neighbors; and by comparing methods, they benefited mutually and by absorbing social rules necessary at such meetings; they also developed ease in speaking and knowledge of public life.

It is very noticeable that in sections where these Clubs have been formed for any length of time, the farmers are, as a rule, more progressive and up-to-date in their methods, show a livelier interest in the work of the Department of Agriculture and are anxious to do anything which will help them to be better farmers, better citizens, and more useful members of society. The keen interest manifested in those sections where the Club movement has been introduced and the success which has attended its efforts to stimulate the movement, have so encouraged the Department of Agriculture that it has been resolved to make every effort to continue the good work, and it is hoped that at no very distant date, the Farmers' Club will play an important part in every section of the Province.

In reviewing more definitely the work accomplished in this movement, we must bear in mind the many ways in which a Farmers' Club can benefit the community. The effects are visible not only in improved methods of farming and greater profits, but also in the educational progress which is the natural sequence of such institutions.

Too many farmers have shown a desire to place one of their sons at least, in one of the so-called professions, to make him a lawyer, a doctor, or to qualify him for the church. A boy who showed ability was considered "too good for the farm." But with improved conditions the farmers' social position is becoming assured. People are beginning to realize that agriculture is a profession—one of the noblest of all. The farmer has ceased to be merely "a hewer of wood and a drawer of water," and the educated farmer, formerly an impossibility, has now become an actual fact. That the institution of Farmers' Clubs has and will materially help to bring about this change is not to be denied. It has shown the parents the value of a deeper knowledge with regard to the farm processes and given them a desire to give their boys and girls a better education, without removing them from the farm.

We have a concrete instance of this in the Club at Ayr, in the County of Waterloo. The members of this Club have been instrumental in promoting an extension class in this school and in getting eight rural sections to unite with them in sending their children to get this popular education in agriculture. They have asked the assistance of the District Representative, Mr. F. C. Hart, Galt, in this scheme. The children will be instructed in all the elementary principles of agriculture, such as cultivation, eradication of weeds and their identification, judging and feeding of live stock, etc. In short, they will receive such an education as will enable them subsequently to have an intelligent comprehension of their work.

In many of the rural sections teachers have been induced to start experimental plots for the children at their own homes. All pupils undertaking the work are compelled to exhibit their results at the local fair, held in the fall, and prizes are to be given for the best results. These young farmers will in this manner be made to realize at an early age, the importance of improved seed and variety selection, and will no doubt materially raise the standard and scope of exhibits at the fall fairs.

Again, the educational value of the Club to the adult population of our rural sections, cannot be over-estimated. In these meetings young men realize more than anywhere else their lack of culture and their ability to express themselves. By familiarizing them with the platform, by compelling them to stand up and give voice to their opinions, and by teaching them to reason out questions methodically, these organizations are contributing toward a broader and sounder judgment in the farming community. Young men, realizing their inability to speak are spurred on to make an effort to learn and their wits are sharpened by being brought into contact with men more experienced than themselves.

This applies also to the older members of the community. The acquisition of a little knowledge begets the desire for more and the farmer goes home from a meeting to study the latest bulletins and papers in order to learn what others are doing in his profession. He cultivates a fondness for reading, imperceptibly reads with greater ease and pleasure. His life previously limited and confined by the monotony of farm work, acquires new interests and is rendered infinitely happier.

The Practical Aspect.

Of the practical benefit derived from the Farmers' Clubs, many examples can be quoted. For instance, in many sections of the Province, the potato crops is large, but, nevertheless, in the Toronto markets, the Nova Scotia and New Brunswick potatoes sell from 10 to 15 cents a bag higher than those grown in Ontario. The reason for this is the large number of varieties

used, and the tendency of Ontario farmers to neglect grading their stock. If growers in one particular locality could be induced to confine themselves to one variety which suited their conditions and their special markets, they could command a higher price for their goods. Realizing this, some of the Clubs have taken the matter up and are carrying on a series of experiments with the most popular varieties in order to select the ones most suited to their conditions. These varieties are to be exhibited at their Club meeting in the fall, where they will be examined and discussed as to yield, appearance and cooking qualities before any variety is selected.

Again, we can quote instances where tests for the selection of grain and roots have been instituted among private individuals, through the instrumentality of the Clubs. For a number of years No. 21 Mandscheuri barley has headed the list at the Ontario Agricultural College, Guelph. Though some farmers have received samples of this and have realized its value, yet many of the Ontario farmers have not even been cognizant of its existance.

In one Club in Waterloo County, a member who has grown the Mandscheuri No. 21 for several years has supplied all his fellow members with seed for this year. In Wellington, Prince Edward County, the farmers have begun to realize the importance of knowing which branch of their farming operations is the most profitable . One farmer in this district is carefully estimating by actual experiment the cost of producing and marketing four acres of corn for the canning factory.

In the same way, the dairymen are carrying on a series of careful tests by weighing the milk from each cow, in order to ascertain which cows in their herds are the profitable ones. The fruit growers are realizing the importance of spraying, and in some cases experiments are being carried on concerning time of spraying, mixtures, etc. The question of treating muck soils has become one of importance on a great many farms, and several private individuals are carrying on experiments with different fertilizers and crops for these soils. When we consider that the results of all these experiments will be brought up before the various Clubs and thoroughly discussed, we can readily realize what a vast amount of useful information, gleaned from practical men, can be given to the public through these Institutions.

Another important result of the work of the Clubs is the increased interest taken by farmers in public utilities They have begun to realize the advantages of good roads, rural mail deliveries, telephones, etc. The Club at Ayr, previously mentioned, has been instrumental in establishing in its locality twenty miles of rural telephone system, which has recently become connected with the Bell Telephone Co., and now has a Sunday, holiday and night service, as compared with other districts whose services are closed at 6 p.m., and are not in operation on Sundays or holidays.

What might probably be considered a very unique arrangement has been instituted by the Farmers' Club at Morewood. A bulletin board encased in glass with a felt back is attached to a public building, in a conspicuous place for the use of the members of the Club. It is used primarily for the farmers to advertise anything they may wish to sell or buy. It can also be used to make any announcements regarding meetings. This scheme has worked out very satisfactorily at Morewood, and should, we think, become very popular among many other Clubs throughout the Province.

The Clubs have also created a more lively interest in Farmers' Institute meetings. A few years ago the annual meetings of the Institute held in S. Waterloo were but poorly attended and but little interest was taken in the work. It is especially gratifying to the Department to learn that at the last joint meeting of the Women's and Farmers' Institutes held at Mr. A. Hilborn's residence, June 15th, 1909, the attendance numbered 350.

The meeting was conducted in a business like way, and the increased interest in agricultural topics was very noticeable throughout the day.

It is advisable to briefly mention the ways in which these Clubs confer both a moral and a social benefit upon those who join them. The Institute banquets, ploughing matches, and debates break down local prejudice and foster community spirit, besides creating a friendly rivalry between farmers, which will go far towards producing a higher standard in agricultural communities throughout the Province.

The success of the club movement has been marked not only by the number of additional organizations effected during the Winter of 1908-09, but also by the accomplishments of these clubs and the permanency of interest shown by some of the clubs formed during the winter of 1907-08. At the present time (beginning of August) we have received reports of some 115 organizations and fully 35 of these have been organized during the winter just past.

The reports of the meetings which have been coming to hand show that the members of the more progressive clubs are making use of these meetings to tackle pressing problems which can only be settled by learning of better methods or by concerted action. We frequently find such subjects as:—

"Live Stock Insurance;" "Good Roads;" "The Rural Telephone and its Advantages;" "Co-operation;" "Rural Mail Delivery;" "Manufacture of Whey Butter;" discussed at length and the various phases of the question earnestly and ably presented by those interested and resulting already in action and improvement.

We find also such subjects as: "Potato Growing;" "Preparation of Soil;" "Handling of Manure;" "Feeding Beef Cattle;" "Care of Poultry;" "Judging of Horses;" "Growing of Lambs for Profit;" "Benefits of Drainage;" "Value of Ice on the Farm;" "Care and Management of the Orchard;" "Selection of Seed Grain;" "The Dairy Cow;" "Cultivation and Rotation;" "Value of Silage;" "Grain Improvement;" "Production of Winter Eggs;" "Raising of Hogs;" taken up in the same earnest way; and as a result of suggestions which they have received at those meetings many of the members of those clubs will put into practice methods which are an improvement on those which they have employed in the past. Many clubs will make a start this year in co-operative production.

We also find some clubs undertaking experimental work and as a result of the same the individual farmer will help his neighbor while helping himself.

Reports also show that many club members are not overlooking the fact that opportunity is afforded to develop the art of public speaking. In evidence of this many debates have been held in addition to the encouraging of discussions upon practicable subjects.

Many subjects of a broad educational nature also appear upon the programmes. The farmers want to have a more thorough knowledge and understanding of the larger questions which affect the nation and which effect the standard of citizenship.

It is impossible to do full justice to the success which is evident in the club movement to date. The future holds much of promise if the current of enthusiasm is taken full advantage of and the work guided by thoughtful and aggressive action past the difficulties which have arisen and which will be sure to arise in the future, from time to time. It will take the unselfish and persistent assistance of the many farmers who have allied themselves to this work and the same public spiritedness on the part of such future recruits to assist the Department to draw from this movement its greatest

good; without this spirit the work cannot be successfully launched in any locality. When a club is once formed and put on a basis where there is some practical work being done and where the members realize that their club and their membership in it means dollars and cents to them, then that club will progress without so much assistance on the part of the public spirited men, at least such men will be helping themselves while helping others.

Mostly every farmer who is a keen student of the conditions which affect his calling and affect the relation of his calling to the nation as a whole and to the other great interests which, with his own, make up this great Dominion of ours, is, one feels sure, fully appreciative of the inestimable value which a progressive Farmers' Institute can be to its members

Many of the advantages of a local club to its members have been presented to the farmers of Ontario in official publications, in public addresses, in newspaper editorials, etc., but it might be instrumental in furthering the interests of this work to give some of the advantages recited by some of the members of clubs who are farmers themselves and who value the work from a farmer's standpoint.

Mr. M. S. Snyder of Roseville, Ont., writes, in part, as follows:—

"I am quite taken up with the work done at these Clubs, as they are very interesting and educational in our line of work, besides creating a feeling of fellowship and good will among the farmers. None of us are too old to learn and at these meetings some of your neighbors will be sure to tell you something that you didn't think of before. Farming is getting to be a science and takes more brains than it formerly did, and what the farmer needs is co-operation. Every other business is co-operating, and the farmer will have to co-operate with his neighbors to get his dues.

"Another good feature of these Clubs is that, by getting on the platform and speaking in public, a farmer loses that shyness which is so prevalent among farmers. Farmers, unless they have a training of this kind, are an object of pity upon the public platform and can best talk with their feet on the stove in the country store, to the boys. Consequently, we are represented in our Legislature, not by farmers, which should be the case, but by lawyers and doctors, etc., who do not know much about the most important industry of this country."

Mr. N. B. Clarke, of Wellington, Ont. writes, in part, as follows:—

"The Club has been a benefactor to the community in many ways. It has succeeded in breaking down local jealousies; it has aroused an interest in Agriculture, which is demanding information which can only be supplied by the Department of Agriculture through its district Representatives in the shape of short courses and special Institute meetings. It has shown the individual farmer how he can conduct experiments on his own farm to his own advantage and for the benefit of his neighbors, which work, when gone into generally, affords a great deal of valuable information of the most effective kind. It also offers possibilities in a co-operative way, and might easily lead into the forming of a special co-operative association. Finally, to the average young man on the farm, it affords a training in public speaking under the most favorable conditions.

"A well organized system of Farmers' Clubs in the county has given the business a new impetus, and the individual a fresh hope and a higher opinion of his own calling, which cannot help but show good results in the future."

Mr. J. N. Slater of Galt, Ont., writes, in part, as follows:—

"Another thing which our Club was the means of getting started was a discussion on rural telephones, and, as a result, I believe we will have a system established here this coming summer. So far, we have had no trouble in getting members to take part in the meetings, and, as they are nearly all young fellows under forty years of age and quite a number under thirty, you can readily understand that it has a beneficial effect, as it causes them to think and also gives them confidence in addressing a public meeting.

"Properly managed, I believe there is a great future in store for the Farmers' Club, in the exchange of ideas, in the possibilities for co-operation, in the conducting of experiments and the exchange of speakers of different Clubs. The farmers, when banded together, are also in a better position to take the initiative in anything which affects their interests."

Mr. Thos. Lunn of East Oakland, writes, in part, as follows:—

"Our Club was organized on February 8th, 1909, and was a success from the beginning. We continued to hold meetings every two weeks until April 19th. Since then we have been holding our meetings once each month with good results. Some advocate abandoning the meetings during the summer months, but I consider it a great mistake to do this. These monthly meetings during the summer tend to keep the Club together, and we find that our members are always facing some new problem as the season advances. We aim to shorten our programme for the summer meetings; simply agricultural subjects are discussed, and the meetings are over by 10 p.m. This latter is important, as late meetings will kill any Club.

"I need not tell you that it requires but a few shrewd, active members that take an interest in the work to make any Club a success, and I am satisfied that there are enough such members of the Farmers' Institutes in Ontario to organize a good live Club in every school section in Ontario.

"You will notice with pleasure, I am sure, the new heading on this letter. "East Oakland", when I tell you that we got our new Post Office through the efforts of the Club. This is only one of the things we hope to accomplish, provided we are able to keep up the interest of our members and have them realize the benefit of working for each others interests."

Mr. Arnold M. Platt of Cherry Valley, Ont., writes, in part, as follows:—

"I can assure you it is a pleasure to be able to assist the Department in any way I can, as we farmers appreciate the Department's endeavor to assist us in many ways.

Probably a comparision of conditions this summer and last in my own locality would be of interest to you, and would also show the outcome of what we have heard and learned at our Club meetings last winter. Last year I never heard of a single patron in our factory who weighed or kept account of the milk produced by each individual cow. This year nearly all are testing their herds to show for certain the cow that is not paying her way. It is a common sight when driving along the roads to see the spring balances hanging in some tree or suspended from the roof of the milk stand.

"The short course in Picton last March has done a lot to set us thinking about herd improvement. The object lesson there has convinced many of us that feeding and breeding must win in the end. We have two pure bred Holstein bulls for service in this locality. Last year they stood at a service fee of $1.00 and had very little to do. This year their owners have doubled the service fee and they have all the business they can do and, in fact, we need double the number of that class of animals in this neighborhood. The day of the scrub bull with his tempting fee of 25 cents is over, for breeding purposes. Last year we raised any big heifer calf from our cows and never gave a thought as to its sire. But this year it is a standing joke that every calf you see being raised is a black and white. It must be that color, or it is useless. The Holstein breeders are reaping a harvest. One of my neighbors drove twenty-five miles and bought four three-weeks-old, pure breds, paying $50.00 for each of them. There are a number of pure bred bull calves in this township now and in a very few years we all hope to have herds that will yield a greater profit. We are all for dairy breeds in Prince Edward County.

"Another important phase of the work done by the Club movement is the deeper interest that is being taken in the care and spraying of our orchards. The canning industry has developed so rapidly that many of our farmers have not been giving their orchards a fair amount of attention. I have an orchard of about two hundred and fifty trees about twelve years old; the oyster shell bark louse became so bad that I had almost given the orchard up for lost. However, thanks to the discussions at our Club last winter, I became posted as to the best methods of treatment and I am now in a fair way of controlling the pest.

"Last year there was practically no alfalfa grown in this locality. This year nearly every farmer down the line has sown more or less. I, myself, have as fine a catch as one could wish for, and Mr. McVannell tells me that he believes this county with its limestone soils is well adapted for this clover.

"In closing, I wish to say that I hope I have given some information of value to the farmers generally. The Farmers' Club is just what is wanted. We are waking up out of the old ruts, and are prepared to take advantage of all information which will assist us in improving our position as farmers, both so far as financial returns and social conditions are concerned."

For the benefit of those reporting club meetings, we give here what might be considered a very satisfactory report.

The Roseville Farmers' Club meeting was held on April 12th, 1909, with an attendance of 33. The first subject discussed was "Preparation of the soil for seeding." Interesting adresses were given by Messrs. Chas. Zen and Samuel Rohr; they were followed by a somewhat lengthy discussion by the members of the Club. Mr. John Brecken gave a talk on "Potato Growing." All the members took an interest in the addresses and a great deal of valuable information was gleaned during the meeting.

We give below a copy of notes used by Messrs. Zinn, Rohr and Brecken in giving their addresses. These will serve as a guide to Club members in preparing notes for an address.

Mr. Chas. Zinn.—"Preparation of soil for spring seeding."

1. Don't start before the soil is ready and don't turn up your soil by spring plowing if it has been plowed in the fall. If you plow it again in the spring, you turn down what the frost has pulverized. I believe that cultivation and disk are superior to gang plows for the above reasons, and also because the ground will not dry out so much.
2. Don't believe in working up the soil more than 2½ inches, as it will hold the moisture better.
3. Get a good fine seed bed to insure a catch of clover.
4. Believe in fall plowing. Sow oats as soon as land is dry enough. Better crop.
5. If sod is manured and plowed about four inches deep in the spring and then well worked and sown to barley, it will produce a good crop.
6. Don't sow grain too deep or it won't start so well. 1 inch or 1½ inches is deep enough.
7. If you draw manure on the fields in the winter, don't plow it under in the spring, but keep it near the top so the grain gets the benefit. The manure has to be in liquid before the seed gets the benefit, and the liquid goes down, so, if you plow the manure down, the grain only gets the smell of it which won't benefit it.

Mr. Samuel Rohr:—"Preparation of soil for spring seeding."

1. Lost one crop of barley by sowing too deep.
2. Believe in broadcast sowing in spring, all but peas. Sow clover seed behind the hoes.
3. Prefer in preparing the soil—Disk the soil, then cultivate both ways, harrow if necessary and then sow.

Mr. John Brecker:—"Potato Growing."

1. Prefers clover sod manured. Plow about four inches deep, planting in every third furrow. Plant about last week in May.
2. Don't plant when dew is on the clover, as it is apt to rot the potatoes.
3. Run over the potato ground with disk just when potatoes are coming up; then harrow.
4. Leave two eyes when cutting seed potatoes. Don't cut too long before planting.
5. After potatoes are cut, I roll them in plaster. Think it dries the set and keeps it firm.
6. Scuffle regularly and hill them before the tops cover the rows.
7. Use 1 lb. Paris Green to 100 lbs. plaster and very seldom go over the potatoes more than once. Have had no trouble with blight.

STANDARDS OF COUNTRY LIFE.

By J. B. Reynolds, B.A., O.A.C., Guelph.

At this present moment, there is no need in Canada more urgent than to maintain standards of excellence in country life. To hold what we have in this respect, and to improve these standards so far as possible, should be the aim of every reformer and every public educator. I say to maintain these standards: for it will not be denied that the pioneers who have built for this land so firm a basis of prosperity and morality, have been men and women of brawn and brain and sound character. Any set of influences that tend to lower these standards of our forefathers, either by attracting away from the farm the brighest and the best of the boys and girls, or by working havoc upon the character of those that remain, must be zealously opposed; and any set of influences that tends to elevate the standards, must be carefully fostered.

Meanwhile the situation presents grave dangers. The influences that draw the youth away from the farm are every day increasing in power,—influences, too, that appeal to the energetic and ambitious. At the same time demoralizing influences have been allowed to work on ignored or unchecked. A current magazine has this to say on the question: "Except in the congested portion of our large cities where poverty, ignorance and vice walk hand in hand, conditions for the right training of a boy are more favorable (in the city) than in the rural communities, although we often hear the opinion that the best place to rear a boy is on the farm. Such an opinion is not founded on an accurate knowledge of the relative advantages of the two places for rearing boys. The salvation of the city boy has been the object of our endeavors. That his country cousin, surounded by all things which make for purity of thought and deed, needed salvation never entered our minds. We warned him against the 'wicked city,' with its billiard saloons and dens of vice, and we never dreamed that right out here under God's pure heavens we, through criminal negligence and shocking indifference, were subjecting or allowing him to be subjected to influences which would broadly pave the way to the very hell we desired to save him from."

Such statements as the above should not be made, or endorsed, unless they can be verified. I purpose to set forth those conditions in the country which, favorably and unfavorably, affect the standards of excellence in country life.

The first of these influences is Work: the work on the farm,—the length of the hours of work, the conditions amid which it is performed, and its rewards, as compared with the hours, the conditions, and the rewards of work in town or city, are factors with all boys and girls who are free to choose whether they will work in the country or work in the town. It is not a question of work or idleness or of work or play,, says one of our sages: "We must all toil, or steal (howsoever we name our stealings) which is worse; no faithful workman finds his task a pastime." It is a question of the conditions amidst which the work is to be done, and of the fitness of the worker to the task, that has to be considered. So far as the conditions are concerned, much is in the hands of parents to control. To make slaves of boys and girls, by assigning tasks that are much too hard and laborious, that fill their hours from daylight to dark, is to engender in early and tender years a distaste for the work of the farm that will inevitably drive them to seek more congenial and less exacting occupation, when the time comes for them to make a choice. A friend of mine, a very capable and energetic teacher in a Canadian college, told me that he acquired a distaste for the farm while still a

boy attending the public school. In the winter, it was chores, chores, chores for every spare minute before and after school; and in the summer he was given a horse and a stoneboat, and it was stones, stones, stones unceasingly. Parents who want to drive their children from the farm, may do it thus most effectively.

And yet, this is not necessary. By the thoughtless and sometimes cruel, injudiciousness of parents, an impression of slavish monotony is imparted to farm work, that is not at all its true character. It is within the experience of all who know the farm intimately, that farm work has a variety and an interest that are altogether wanting to the same grade of work in town. When all the work of the farm is taken into view, it has not only a variety but also a pleasantness of surroundings that cannot be found elsewhere. Factory work and office work present, for the most part, the same dull round of duties from day to day, unchanging with the changing seasons. On the farm there is endless change of demand on body and brain and will, that calls forth individuality, design, and resource.

Following is an extract from the current number of the *Weekly Sun*:

"Nor is there any more reason for the movement of young men from Ontario farms to cities. It is true the protective, bonus and subsidy systems give certain advantages to the cities as against the farm. But these advantages are for the few—the "captains of industry;" the masses, the men who toil with hand or brain for wages or salary do not share in the plunder. For the vast majority of these the future holds no promise but a life of toil, the best that is to be hoped for being that the end may not be delayed beyond the period of earning capacity. The rewards of the average Ontario farmer are better and surer than the rewards offered the average man in the city."

A second influence is Play; by which I mean recreation, amusement, diversion, anything that is done for the pleasure of it. A great many obvious remarks might be made here, remarks the truth of which would be apparent to everybody. It is obvious, for example, that there are many diversions common to city and country, games that require only time and space for their pursuit. And if the city boy has more time, the country boy has, or should have, more space and greater freedom for his games. It is also obvious that the city boy has many opportunities for diversion that come rarely to the country boy, or are denied altogether to him; the diversions of public entertainment that have to be paid for; and the kaleidoscopic and panoramic scenes of the city streets. But what shall be said of the kaleidoscopic and panoramic scenes of sky and earth that roll and change before the vision of the country boy, if he have eyes to see? This, of course, is a matter of taste and education, as Browning humourously depicts when he makes one of his characters compare life in the city with that in a country villa:

> What of a villa? Tho' winter be over in March by rights,
> 'Tis May perhaps ere the snow shall have withered well off the heights:
> You've the brown plowed land before, where the oxen steam and wheeze,
> And the hills over-smoked behind by the faint grey olive trees.
>
> Is it better in May, I ask you? You've summer all at once;
> In a day he leaps complete with a few strong April suns.
> 'Mid the sharp short emerald wheat, scarce risen three fingers well,
> The wild tulip, at end of its tube, blows out its great red bell
> Like a thin, clear bubble of blood, for the children to pick and sell.
>
> Is it ever hot in the square? There's a fountain to spout and splash!
> In the shade it sings and springs; in the shine such foam-bows flash
> On the horses with curling fish-tails, that prance and paddle and pash
> Round the lady atop in her couch—fifty gazers do not abash.
> Tho' all that she wears is some weeds round her waist in a sort of sash.

Are the poets speaking common truth when they remind us of the beauties of nature, or are their utterances only feigning and frenzy? Is the appreciation of these things possible only to those of poetic temperament or do the poets speak what common people feel? Is there truth, for example, in Whitier's 'Barefoot Boy'? Every word of that little piece should be read in this connection, but I content myself with quoting this:

"O for festal dainties spread,
Like my bowl of milk and bread,—
Pewter spoon and bowl of wood,
On the door-stone, gray and rude!
O'er me, like a regal tent,
Cloudy-ribbed, the sunset bent,
Purple-curtained, fringed with gold,
Looped in many a wind-swung fold;
While for music came the play
Of the pied frogs' orchestra;
And, to the light the noisy choir,
Lit the fly his lamp of fire.
I was monarch: pomp and joy
Waited on the barefoot boy!

And what country-bred youth can fail to respond to the appeal of these words:

"The woods I walk in on this mild May day, with young yellow-brown foliage of the oaks between me and the blue sky, the white star-flowers, and the blue-eyed speedwell, and the ground-ivy at my feet—what grove of tropic palms, what strange ferns or splendid broad-petaled blossoms, could ever thrill such deep and delicate fibres within me as this home-scene? These familiar flowers, these well-remembered bird-notes, this sky with its fitful brightness, these furrowed and grassy fields, each with a sort of personality given to it by the capricious hedge rows—such things as these are the mother-tongue of our imagination the language that is laden with all the subtle, inextricable associations the fleeting hours of our childhood left behind them. Our delight in the sunshine on the deep-bladed grass to-day might be no more than the faint perception of wearied souls if it were not for the sunshine and the grass in the far-off years, which still live in us and transform our perception into love."

These then, are the influences well worth cherishing, that come to country youths at all times, but particularly in the wanderings of their leisure hours, and that help to form a taste and a character simple, natural, and pure.

A third influence is Society: and herein lies the greatest danger to the country youth. Not that country society is lower morally or in any other way than city society. The danger lies in the promiscuousness of it. In the city for the most part, boys and girls keep with those of their own sort and age. They are protected against promiscuous mingling with persons of all sorts and ages. In the country there is little or none of this safeguard, and what horrors of iniquity and moral filth enter the mind of the country youth by listening to the conversations in the corner store, in the blacksmith shop, and, yes, even at the church door! Every man bred in the country can call to mind the foul conversations that he heard in his youth among gatherings of men, unspeakable indecencies that perverted innocence and stirred up unholy imaginations. The country home itself is not free from this danger. Many a country youth, boy and girl too, has been morally degraded by the conversation of the hired man. The hired man, perhaps, is no worse and no better than the average man, but he is generally thoughtless of his influence, and often coarse and obscene in his

language, and as a member of the household he is thrown in continual contact with the children of the home. It is criminal negligence on the part of parents not to protect their children from this, as well as from outside social influences that are likely to be evil. Of a country school that I attended when a boy, I heard recently that there were not half-a-dozen of the larger boys and girls in attendance who did not habitually use profane and obscene language. How can this be?

The influence of the home in establishing and maintaining high standards in life is generally recognized; and the question particularly before us is, how to maintain the standards of excellence in country society, first, by saving to the farm some of its brightest and most capable sons and daughters; secondly, by controlling those influences that affect efficiency and morality.

The home is the most important of those influences because from the home proceed all these spiritual forces that make ideals and character. So little do we as a people appreciate ideals, and those forces that go to make ideals, that it may be worth while to place the chief emphasis there. Those things that boys and girls are taught to look upon as worth knowing; those things they learn to believe are worth having; those things they are taught to regard as worth doing; that type of character which they learn to think it most worth while to be; these ideals of knowing, having, doing and being, have, or should have, their source in the home; and if we are to credit the testimony of very many great and good men, the chief source in the home is the teaching and the example of the mother there.

The question, then, resolves itself into this: what should boys and girls know, if they are to be kept on the farm; what may they reasonably expect to possess; and what principles of conduct and character should be taught.

Plainly, it appears, they should not be left in ignorance. With equal plainness, it appears, that there are certain kinds of knowledge, learned of schools, that is the common property of city and country,—the general branches of knowledge, so to speak. But what special knowledge should be imparted? It is evident that the public schools, as at present constituted cannot be trusted to impart the special knowledge required by the boy and the girl that are to live on the farm. So soon as country taxpayers make up their minds to be liberal enough to pay for experience and skill as well as mere day labor in the schools, just so soon, and no sooner, may they look to the schools to impart something beyond the ordinary rudiments. Meanwhile the responsibility rests on the home. Here let me quote from a current magazine a few words that not only bear directly on the point, but also have behind them the power of a well-known name. Says Mr. J. J. Hill, head of the Great Northern Railway system:

"Inspiration of this character should be given the young in the home first; later, in the schools and colleges.

I put emphasis, though, on the statement that a child's best education begins, if the parents know their business, in the home and not in public institutions. The farmers in all parts of the United States and Canada, whose children are satisfactorily developing their pioneer work on the farm, are those who began educating the child in the home as to the value of soil work.

We have at one point on the Great Northern system, a farmer who, ten years ago, had a son eleven years old, who frankly told both father and mother he hated the farm. He knew nothing of cities, but he had a desire to see them and live in them. The father and mother had many serious, private conversations over the boy's state of mind. They wished to do the best by the boy.

But here at home were 160 acres of land needing a successor to the father to look after them, seven horses, five cows, some calves, hogs, sheep and chickens. All this data came to the industrial department of our system, because we make it a point to know a great deal about the capacities of the various farmers along our lines. A good farmer is one of the best aids a railway can have.

This particular farmer, after he had made up his mind that his boy could be converted into an excellent soil tiller, joined with his wife in a secret campaign against the lad's desire to go to a city. They didn't say to the boy: "You must do this and that." They didn't stick his nose down into a furrow and make him hold it there.

On the contrary, they began to brush up their knowledge about things and to increase their store of interesting facts. They bought books, papers and pictures and quietly led the boy into these. For instance, I know they made up a small but valuable library on soil analysis. The boy got into this, and all of a sudden he began to understand the reason why the crop yield of the lowland was different from that of the upland; why the black loam had a different producing value from the yellow, sandy patch.

He talked to his father a great deal about this, and asked many questions. The old man chuckled to himself, but was careful to give the boy the truth, and to make that truth just as fascinating as he could. You know you can give a boy or girl the truth in one way, and it will clog up their brains as dry, unpalatable bread chokes the throat. The same truth can be given with a trifle of legitimate color and with the intention of provoking further study, and the child will grasp it eagerly and push ahead.

This boy began to keep a book, and in it he made comparisons in figures between this five acres and that five acres, as to yield. He thought he would like to dip into chemistry—applying a knowledge of chemistry to farming. Father and mother heartily encouraged him in this. The wonders of nitrogen, that great, living, doing thing of all food and life production, suddenly dawned upon him.

Some years later this boy's father said: "When Billy began to understand chemistry, when it broke in on his intelligence that brains, knowledge and farming had a big connection, that stupidiy and dullness have nothing to do with the farming that pays, he blossomed out like a corn patch after a good rain. He came right into his own. He experimented on mother and on me, on everything there was on the farm. He made big blunders and he had to pay for them, but all the time he was getting himself disciplined and adding to his knowledge. When he was seventeen years old he could run that farm. And he did. He went to the city once a year to take some of the rough edges off himself, but he came back home every time a better man and farmer."

Education of any kind, knowledge in whatever branches, will inevitably cause the conditions of many a farm home to seem distasteful to the boy or the girl. Enlarge the mind, widen the vision, cultivate the taste, as you can not help doing by any process of education, and you make a new creature with new desires. And this is why so many girls and boys, whom their parents have been ambitious to educate, leave the farm; either that during the process of acquiring education they have imbibed false ideals of material surroundings; or else the home is bare and unlovely within and without, devoid of books, of conversation, of recreation. Plainness and even poverty may be endured, but ugliness and dullness not. A woman with the will and the taste can work wonders in beautifying and enlivening the country home.

Flowers spring to blossom where she walks,
The careful ways of duty;
Our hard stiff lines of life with her
Are flowing curves of beauty.

Our homes are cheerier for her sake
Our door-yards brighter blooming,
And all about, the social air
Is sweeter for her coming.

It seems to me that in the farm home should be born a wider and nobler vision not only of the dignity of farming, but also of its serviceableness and its possibilities. The world is fed by the farm. Wealth in its divinest form is produced there. The highest ideal of Christian conduct is service, and to accept the work of producing part of the world's food is to realize that ideal of conduct. This ideal alone, however, high and worthy as it is, is not sufficient. To it must be added a measure of assurance that the material rewards will be sufficient to maintain right standards of living. Here I may again be allowed to quote the homely and forceful words of J. J. Hill;

"All our national census reports, school statistics, commercial reports, show that the cities are crowded with boys and girls who earn little and produce less. Suppose their parents of the country life had gone at them this way at the time they were first thinking of work.

"You can earn in clerking, in the factory or the shop of the city, at your present age, not less than $20 a month, not more than $60 a month. You will have long hours in bad air, your food will be insufficient, you will live in stuffy quarters, you will be in fierce competition with thousands of others; if you win, it will be only after long years of brutal work; you will be working where the world really does not need you.

"But now, my boy, here is an acre of land. It will cost each year to keep it up and make it produce, three to five dollars; according to your intelligence in handling it, you can make it pay above cost from twelve to one hundred dollars. Every acre you add to it and treat the same way will increase the profit. You will live in the sunshine and air. You will have big muscles, big sleep, and big appetite. Your land will give you most of your food. You will live with and ride behind horses. You will have cattle and fowls earning for you all the time. You have only to put energy and intelligence into this work, and, instead of being a slave in the overcrowded city, you become a king of acres, a producer for the whole world."

AGRICULTURAL EDUCATION.

By Wm. Johnson, St. Marys.

On former occasions I have spoken of agriculture as being a natural life. Amid all those activities to which our energies are directed it is most favorable to virtuous conduct. It is productive of ideal physical development It affords great opportunity for intellectual culture. If we seek strong muscular organisms, we go to a farm for them. On the farm are found all the elements that make healthy minds in healthy bodies. The atmosphere is there; environment is there with healthful exercise and pure life. If contamination affects young minds on the concession line, it is imported. Conditions entering into rural life are favorable to reflection which is the greatest protection against excess. If great intellects are not the

natural outcome of strong bodies, physical strength is necessary to sustain them. To work out the plans of an active mind requires strong machinery. It is by a continuous exercise of all those powers in farm life, that success can be obtained. There is no chance fortune on a farm. If you do not treat your honest acres in a honest way, you will find a very feeble and half hearted response to your efforts.

As a rule on our Canadian farms there is a fair proportion of natural ability. Compared with those persons engaged in other lines, whereby men obtain food and raiment for themselves and families, farmers are quite up to the average. In general information regarding a great many exegencies that enter in our daily life, they are well in advance. As to broad and comprehensive thought, regarding either their own business or those surrounding them, they are in far too many instances sadly in the rear.

We have plenty of muscle, energy and determination, important factors in success; and yet in many cases we do not succeed. It seems to me that although fully equipped by nature for any emergency, we have not availed ourselves of these advantages as intelligently as we might. It does seem that we have not made such progress as we might have done, if our energies had been properly directed. I believe we have wasted a large amount of valuable time watching other people's business, which in our narrow contracted manner of thinking, we considered was inimical to our own. We have been unreasonable suspicious (and are so still) of every person and everything. This has recoiled on ourselves. There is no gainsaying the fact, that farmers considering their wealth, numbers and intelligence, have not the influence in this country they ought to have. Our opportunities for improvement have been lightly thought of, and too much neglected through our narrow views of life. We have the franchise and we often use it like fools. Our aspirations are misdirected in some way. Notwithstanding the fact, that we have many clever farmers whose abilities we could use to our advantage, we give them no consideration, except it be to oppose their well directed effort for our good. The result is that men of this class are often driven from public life, and we accept a very inferior product in their place.

In those waves of periodical excitement, which have passed over our country affecting the agricultural class, what has the farmer accomplished? One thing we did do, we succeeded in making ourselves a laughing stock to sensible people who were outside of our own order. We fell at last as ripe fruit into the maw of the sly politician, to whose music we still dance and think we are happy.

The Grange and Patron movements of a few years ago brought forward no great leader. They formulated no new theory. They introduced no new priciple. In the centre of these new associations were for a time a number of intellectual farmers that would have been useful to the agriculturist. Several of these men were afterwards useful to us, but it was not till they stepped outside of our society into another atmosphere. When the high court of these institutions met, which was to revolutionize rural life, and supposed to represent advanced thought from a farmer's point of view, what was the result? Our discussions that were to affect the greatest interest in this country, and show to the world, that a new light had arisen on this Western Continent, which would bring about a revolution in agricultural methods, never rose above a few desultory remarks on the price of sulphur and globber salts.

The principle on which these organizations were based was too narrow, they were to selfish to enlist the sympathy or challenge the esteem of liberal minded men. The subsequent history of these movements are such

as might be expected. In spite of the efforts of several honest and good intentioned farmers who still endeavor to maintain an interest in them, it seemed hopeless. They became at last, a football for politicians, and were so short of cohesive principles that political hacks affected to sneer at them. As factors in our moral education they were dismal failures.

Although these institutions were not a success, Canada yet retained on her farms clever and progressive men. When the Grange and Patron movements failed they kept on the even tenor of their way, until they have suceeded in placing Canada in the front rank of nations as a great agricultural country. These men have been our salvation. True greatness in any department is only given to a few. To these few in Canada, belong the honor of improving our breeds of cattle, and producing a quality of goods in dairying and other farm industries, practically defying competition. But even now I regret to say, that these innovations have to be forced on us at the point of the bayonet. We have to be goaded into progress by more progressive men. Whatever may be our position now as a great agricultural community, we have been slow to come to the light. Until the Guelph College was established, our endeavors to improve rural conditions began at the wrong end. By an imposing array of legal enactments, efforts were put forth to prevent the farmer from crucifying himself by his mismanagement. *We were allowed full scope during the impressionable period of our lives to go uneducated in our business, and then had heavy legal penalties imposed on us in our manhood for what we did not know.* It is of the utmost advantage to a young person beginning life for himself, if he has been educated in this important principle, that honest success in any business is determined largely by the broad idea of making more dollars, rather than by the narrow thought of squeezing a few coppers. To a surprising degree, so far we had succeeded in giving some sort of symmetry to the animals tail, but his head remains about as formerly.

It seems clear, therefore, that in order to make permanent way in agricultural knowledge we must begin at the head. If we can eradicate former causes of failure we need have no fear of the growth by which they will be supplanted. To reach an ideal standard of farm management, mind and muscle must be trained to act together. These must not only be trained to act in concert, but they must be continuously kept in action. Hard work alone without being guided by well directed thought, will accomplish nothing very great. It is mind that sets the pace; it is thought that wields the magic wand. Thought makes new plans; it makes new discoveries; it extends human knowledge. Labor solves nothing new: it is the handmaid of thought only, and transforms subtle emanations of our minds into material things. It constructs and renders available to human enjoyment the inventions of great men which if still left in the incipient stage of thought could not affect the worlds progress. Therefore without thought, nothing would be obtainable; without labor nothing would be obtained.

It will be noticed, also, that if agricultural evolution is to keep pace with evolution in other lines of human industries, that an Agricultural College is a necessity. The rural mind must be cultured and trained in some institution whose genius, teaching and environment, must be strictly in accord with those principles which it inculcates. There must be no diversity from pure agricultural lines if ideal success is to be achieved. Those men who have made great discoveries have followed the trend of there predilections and scholastic training. This will be so apparent to an ordinary reader that I need scarcely adduce evidence in its support.

Discoveries in astronomy were not made by carpenters, nor by veterinary surgeons, nor by farmers. Astronomical progress has been made, by men whose mind was constantly directed to that science. So it is in medicine, electricity, telegraphy, etc. Improvement in stock breeding during the last century, which has been so marked, was not carried on by shoemakers, bankers, or store clerks. It was all accomplished by practical farmers, who toiled incessantly with mind and body to produce a certain ideal. These men had no college training or object lessons as we have now. They saw a possibility before them and they determined to attain it. All the achievements of man therefore are the result of thought properly directed, coupled with continuous toil. The great lack in agriculture today is a broadening of the mind of those engaged in it. This implies a continuous application of our best brain when there is unbounded scope for its exemplification on every farm. It is not enough for a farmer to make periodical spurts in seed time and harvest, and then relapse at all other seasons into stupid inactivity. It is not necessary that he should toil from sunrise to sunset like an ox; nor is it not an indication of progress, that he speculate from day to day planning what he will do to-morrow. To-morrow never comes. We may plan, but we must execute. No man can afford to dally with life, with duty, with responsibility. We must as farmers realize our position. We must know what nature expects from us. We must know that unless thought and labor are kept constantly active, that we must forever remain, comparatively speaking, as hewers of wood and drawers of water. As a matter of fact we have hitherto held ourselves at too low a price. As a rule the world accepts a man at his own figure. We have despised ourselves; we have despised our calling; we are not gentlemen; we are only farmers. That implies, of course, that there is nothing more to be said. Any farmer using such an expression in regard to his business, is a libel on agriculture, and for him there should be no success.

Having so far in this article pointed out the necessity of broader views and higher ideals of agriculture life, I may be permitted to indicate in my humble way what appears to me would to some extent at least solve the problem of retaining young men on the farm, and lead them to greater success. In doing so, I do not wish to be understood as finding fault with existing conditions; nor am I criticizing those methods already in existence at the Guelph College and in Farmers Institute work. I desire rather to discuss present methods with my neighbor farmer, trusting that something may be evolved which will benefit us all, and direct us to higher conceptions of rural life.

And first of all permit me to say, that our past, and to some extent our present system of education has been radically wrong. An academic course in a Canadian High School and College, was calculated to and has most effectually withdrawn from rural life the culture and polish which ought to have been returned to it. While a young boy remains at his rural school there is no danger. So far he has obtained this rudimental work in a rural environment. If the growing lad, to obtain greater scholastic knowledge, has been transferred to an institution such as we have at Guelph, no break would be made in his connection with farm life. There he would meet with farmers' sons like himself. His companions at this College had practicaly been surrounded by the same environment as himself. The same sights, the same sounds, the same boyish amusements were peculiar to them. They would likely all be animated with the same ambition. The atmosphere at such an institution would be exactly like that in their own homes. They would remain during winter under teachers who had been country boys like themselves. In spring they would return

to the old farm with an increase to their knowledge. This they would impart to their former companions who had not been as fortunate as themselves in being there. Their sisters and brothers would be amazed at their acquirements in so short a period, while a partial mother in her heart of hearts, pictured to herself a day when her boy would be one of Canada's great agricultural men. He returns again and again till his course is completed, and he is fairly equipped to enter life on a farm of his own. I may be pardoned if I say that a boy so trained into farm management carries with him the true philosophy of life. I care not to what heights he may attain in after years, he can never get away from his first impressions. I do not care in what sphere he may be placed—he may become a millionaire, he may dwell in a mansion whose marble porticos are marvels of beauty, he may have all that wealth and position can give him—but after all he can never get away from the memories of his youth on the old farm. Visions of riding on "Old Bob" after the cows; tender reminiscences of "Towser" and himself at the wodchuck's hole; the wriggling of the calf's tail when it bunted its head in the pail, and spatered the milk all over him; these I say will cast a halo over his still unsatisfied soul that all his wealth could not buy. I say again, that the man of three score years who has not in his boyhood tasted of rural life; roamed in its summer fields, fished in the creek when his mother expected he was hunting eggs in the barn, has forever lost a charm that could give light and buoyancy to his old age. I believe very few young men who have attended Guelph College diverge into pursuits outside of agriculture; and I as firmly believe that very few young men educated along our old lines (which are still too much in evidence) ever return to it. It seems clear, therefore, that our boasted system of education is undoubtedly inimical to farm life.

In the second place I am pleased to note indications during late years of an earnest endeavor to introduce into our educational seminaries a plan which will be productive of results more in accord with agricultural ideals. To produce any great change will however take some time. An educational system is not made, nor can it be supplanted, in a day. Results, considering the determined opposition once made to Guelph College, are more hopeful than many of its well wishers expected. This institution has certainly passed over the crucial period of its existence, and is being looked on by not a few with considerable pride. I believe during the next twenty years its present equipment and Professional staff will be completely inadequate to instruct the largely increased attendance of young Canadian farmers.—This is a consummation surely much to be wished for; as the influence of the Farmers' Institutes extends, so will that of the College extend. As that of the College is better understood and appreciated, so will the Farmers' Institutes be more and more patronized. They must and will react on each other, and so extend their influence. This will lead to broader views among the agricultural class, and enable them to understand that they indeed have a glorious heritage in Canada's fertile soil. So far these influences are not greatly felt. To be fair, however, how could we expect they should? Let us go on and support Institutions which are brought into existence for our own benefit. Let us stand by them as men who are alive to our own interests. In too many instances these institutions have not passed the point of ridicule, and gone beyond the reach of ignorant disparagement. For instance a young lad has attended the College for a season or two, he comes back to his old comrades, but he has not brought back with him exactly his old ideas of rural life. His mind is broadened somewhat. He does not stand in the same relation to his old associates as formerly. There is an air of superiority on one hand

and a feeling of inferiority on the other; A spirit of jealousy is thus aroused. The country lad who has remained at home affects to despise what he calls book and gentleman farming. It is only a matter of a short time however when this will cease to exist.

Again there are many old stalwarts of pioneer days, who have fought out an independence in spite of all obstacles. These men are usually persons of good common sense and fair judgment. In their young days there was not a Guelph College nor Farmers' Institutes and who with a self satisfied air seem to look at these modern ideas with contempt. As a matter of fact age brings with it ultra conservativism. These men are satisfied with their own methods and they argue that it ought to satisfy their sons. I know of no class to which this manner of reasoning is more applicable than to farmers. To bend these sturdy old oaks of rural life you may as well try to bend Cleopatra's Needle over your little finger. They want none of your new fangled ideas and so stand aloof.

Again, let us glance for a moment at our attitude towards the College, and other innovations in agricultural teaching, which are unmistakably for our own interest. In this retrospective glance at our conduct, let us be honest with ourselves, and see if we have acted as progressive, farseeing men, either in our own interests or that of our country as a whole. Apart from party politics, that stink pot of agricultural stupidity, I may be permitted to submit one or two propositions of which many of our old farmers are quite cognizant. When the College was first established what was our attitude towards it. Undoubtedly it was the most important innovation that was ever made in our Canadian educational system. Did we express approval of Mr. Carling's scheme, and extend our sympathy and assistance towards making it a success? I regret to say we did the very opposite. We petitioned parliament against establishing such an institution as being inimical to our interest. It is a matter of history which had better be forgotten; that for years subsequent to its opening, Dr. Mills, who was its principal, had to beg county and municipal councils to send one student from their municipality to see what was done there. I may truthfully say that for many sessions except for the foreigners, its class rooms would literaly have been silent as the grave. It appears humiliating to me as a farmer to know that this magnificient institution should have been literally forced on us by an English maker of beer, under a Government at whose head was a Scotch Lawyer, and whose greatest benefactor has been a Scotch maker of tobacco. No Canadian farmer had anything to do with it except to oppose it. Further, when Mr. Drury and Mr. Dryden sent out commissions to obtain and tabulate information regarding our farm industries, did we support them as we ought to have done? It is only a few years since Mr. Monteith sent out a commission to make enquiries and report on an important product of the farm, and we called it a junketing trip for a few supporters. Cold storage in steam ships, railways, etc.. did not excite our interest generally. The appointment of dairy inspectors and instructors who were sent into every section of the Province as educators to keep us farmers from picking our own pockets, was accepted with suspicion and disrespect. These innovations have all been forced on us farmers. and although they have been worth millions, and will be worth millions more to Canadians yet we opposed them. I know whereof I speak when I say that in some quarters they are viewed with unkindly feeling still. We say the College was established as an asylum for worn out politicians; cold storage was a movement in the interest of shippers; dairy instructors and inspectors were created to make offices for a young gentleman brood being every year hatched out at

Guelph. Have not these changes brought enormous profits to every tiller of the soil in this country? If the farmers condition is better now than it was twenty years ago there must be some cause for so welcome a result. The same old hundred acres makes returns of double or treble the amount it did twenty-five years ago, and with less labor. Our environment and social usages are far in advance of what they formerly were. Agriculture has stepped to the front and will remain there. To-day there is no business on this earth which returns surer and fairer compensation with less worry and more independence, than is meted out to the Canadian farmer.

Before leaving this part of our subject we may enquire for one moment how this salutary change in so short a period has been brought about. There is but one answer to it all. Transportation facilities have brought the world's markets to our door. The producer and the consumer practically stand face to face in the interchange of commodities. Our College has equipped instructors, inspectors and teachers in agricultural lines, by whose efforts many of our products are raised to a standard of excellence defying competition. Agricultural Commissions have disseminated information in the breeding and care of stock so that Ontario holds a proud position for her products in advance of all others on this continent, and second only to the mother country herself. Even now, prosperous as we are, I say we are only yet on the threshold of our agricultural progress. If all this is the outcome of a few years' instruction to the agricultural class, on lines special to their calling, as time passes on we may expect greater results still. We have only so far entered the point of the wedge which our sons will drive home. If there has been some little snarling amongst us, at these new ideas, we were no sooner educated to their utilities and usefulness than the heather was set on fire and we adopted utilities and usefulness than the heather was set on fire and we adopted them with avidity. All this indicates that education is the one thing necessary to our progress, to keep us abreast of modern requirements. And lastly, Ontario farmers are under eternal obligations to those great men who lead the way to establish a College for their benefit, and so far have laid foundations for further improvement in rural conditions. It appears that opposition to change in agricultural methods has arisen from this important consideration; that farmers as a class, did not realize the great improvements introduced by specialists, in every department of farm life. This, we take it, is perhaps among the most important lessons to be learned by a student, that there is something in connection with agriculture, that he did not learn nor could learn on the concession line. It is a pardonable vice peculiar to many young men that they know it all. A young person who has not some conceit in himself and his acquirements, I have noticed, will never be a leader among men.

It seems then that agricultural success is becoming more and more a matter of education. By education I do not mean that a farmer's son should be sent to a Grammar School or a University to be crammed with Greek and Latin; that is not education. It is a waste of time humbugging with a dead language, of a dead people, for no earthly use in this very practical world. A farmer boy should be educated on those things that enter into his every day demands on a Canadian farm. There is no lack of material of the highest interest, to any man who loves nature, and has a delight in her wondrous operations. To derive the greatest advantage from this education he should be surrounded by an environment of rural life. There should be no clearage of those conditions obtained at his own home, or at least as little as circumstances will permit. The atmosphere of the Colege should be as near as possible like the atmosphere on his own

farm. It must have this distinguishing feature, however, that its requirements and its instruction, both by precept and example, should be directed in such manner as to excite in the student the highest conception of agriculture as an occupation. This implies that extraneous mind culture outside of agricultural subjects must always be taught as matters of secondary consideration. In the College classes every student must be kept close to nature as she displays herself in that calling for which he is being fitted. Her operations are mysterious, diversified, and unlimited. A student who enters her domain to seek instruction will always be amply repaid. As he is inducted more and more into her secrets, his desire to know more and more will be increased. New vistas in agricultural investigation will be opened up. Those who devote themselves to a study of her operations, are always well repaid, without being clogged by satiety.

If I were asked to name the greatest mistake of the average farmer to-day I would say it was a want of confidence in himself and every person else. He is far too narrow in his conceptions of business, and far too carelss of the waste that is continually going on on his own farm. He is in many cases so anxious to take the beam out of his neighbor's eye, that he is not aware of being nearly stone blind himself. His idea of business is so humble, that it seems a surprise that amid all life's bustle and experience he cannot be made to understand, that every man who calls on him on matters of business is not a thief or a scoundrel. If the "Seminary on the Mount," by careful teaching, can succeed in eradicating this feeling which infests the average rural population a great step in advance will be made. Life on a farm I know is isolated and favorable to cynical thought, which is always bad. When it affects the source of our sympathies however it is intolerable. The idea now established of running excursions to the College has been productive of great good, and should be encouraged in every possible way. Annual visits to this institution have broadened agricultural thought, and incited an interest which did not before exist. It is the greatest object lesson we have ever had. There is so much of what is seen there, experimental and otherwise, practically within the reach of every farmer, and which in thousands of instances I am pleased to know, have been put in practice at their own homes to their benefit. Even when farmers have disagreed with methods practised at the College, these have given rise to discussions which in themselves were of incalculable benefit. The fact of thousands assembling here every year for a day's pleasure combined with instruction is a most hopeful indication of increasing interest. As a rule we farmers do not travel enough. A man to get the best out of himself, which it is his bounden duty to do, must mingle with his fellows "As iron sharpeneth iron, so does the face of man that of his friend." To become cynical is to become a nuisance to yourself and to all with whom you come in contact. A farmer who does not go out into the world gets no new ideas, finds no new methods. As time passes on he becomes more and more like one of his own turnips; the older and bigger it grows the less useful it becomes and more and more unfit for man or beast.

If, therefore, these excursions are productive of good to men who are now bearing the burden of life, in creating a taste for and a higher appreciation of rural enjoyments, it surely could not be wrong to extend their usefulness. The Directors of South Perth Farmers' Institute are formulating a plan for an annual excursion of all the schools in that riding to Guelph College. If we intend our young people to retain a taste for agricultural life, we must see to it that their young minds are directed that way. Let all the school children in Ontario spend one day in each year

at the Farm. Let them see the pleasure grounds around it, which every farmer should and can have—of course to a more limited degree. Let them see the magnificence of the Macdonald Institute placed there for their benefit. Let their young minds be filled with the importance of that calling with which they are so familiar at their own homes. Let the tables be set for them in true farmer style, with wholesome luncheon all day long. Children are always hungry. Let them move from one scene to another, under the care of kind and sympathetic guides. Let them hear the music of love, of patriotism, of home life; in the music hall. Lead them to the play grounds for an hour's fun and enjoyment. If this plan were carried out I am safe in saying, that an impression would be made on their minds in favor of farm life that all the crabbed Greek in all the Universities in Canada could never efface.

Again, permit me to say, the time has come when every effort should be made, to impress the young rural mind with the destiny awaiting this country. It seems to be a principle underlying human progress that no nation can become really great, that does not build on her agricultural population. All the civilization this world has ever seen until our present has passed away. In their historic pages can be found no trace of agriculture, except when on one or two momentous occasions a farmer left his plow and saved the state. Greece with all her artistic accomplishments; Rome with the military glory; Spain with her conquest, and her great ships laden with wealth of India returning to her shores; France with all her refined usages, and maudlin grimaces; these have all sunk to lower levels or passed away. The might of empire has followed agriculture everywhere. When Britain had no cities and with a robust agricultural population, her thunder shook the most splendid thrones in Europe. It came across the sea and on the fertile plains of America, has created the greatest and most progressive people, this world has ever seen. Agriculture has still greater work to accomplish. There is a land which we Canadians are proud to call ours, still to be exploited and which will be greatest of all. Our destiny for ages to come is to be an agricultural community. With us, therefore, rests the responsibility of giving pure life not only to our own nation but to all the world. Civilization is yet incomplete. It has yet to be purified, refined, and attired in garments of unsoiled splendor. It must receive an impetus, by having its life blood impregnated with the ozone and the bright sunshine of our northern skies.

"We are the men of the Northern Zone,
Shall a bit be placed in our mouth?
If ever a Northman lost his throne,
Did the conqueror come from the South?
Nay, there is the land of the true and leal
Where freedom is bred in the bone.
The Southerner never shall place his heel
On the men of the Northern Zone."—*The Khan.*

While we are thus working out our own destiny, we can never forget our aged parent on the other side of the Atlantic. Her history is an object lesson to us all. To her, this earth owes about all it has that is really good. To her we owe the best we have in agriculture and self government. She must be supported at any cost. If she is in the sear and yellow leaf, as some would have us believe, we must help her, and love her who first loved us. Ralph D. Paine says in an article which seems to contain some important truths, and cannot be to strongly impressed on the agriculturists of our Country:

"The heart of the British Empire is rotten, according to the confessions of its wisest men, who see in the physical deterioration of the millions crowded in city slums a graver menace to the life of the nation than any war could offer. Within the last century rural Britain has been almost depopulated until four-fifths of its people are huddled and herded in cities and towns. Well nigh extinct is the race of robust, stolid, and courageous men dispersed in villages and country homes who were Britain's staunchest bulwark through the dominant centuries of her history. The Briton of to-day, the man of the street, of the rank and file, is street-bred, stunted, narrow-chested, without stamina, lacking moral and mental ballast.

"One generation after another has been pouring out of the green fields into the cities and left to breed and multiply and stifle and starve, a prey to official indifference, victims of greedy landlords, creating slums for lack of room to live with any regard for health and decency; a vast, seething, submerged world beneath the notice of the upper-class. The yeoman had been transformed into the hooligan.

"For the first time during her valiant centuries of warfare, Britain could not stand alone. The colonies helped to save her in South Africa by sending men of the stamp and breed which the Mother Country had been wont to rear for herself in days gone by. Her statesmen were compelled to question the use of a strong army and navy if there was heart disease at the center of the empire. What such conditions will some day mean to national welfare is written big and bold in Britain's confession that her manhood has decayed and that her race is degenerate."

Conservation of the forests and the rivers and the mines, splendid undertakings as they are, must be held secondary to the conservation of Canadian manhood, if the foundations of their nation are to be secure and strong. Britain has furnished a tragic object-lesson for the rest of the world to take to heart, and the doctrine of "back to the land" has become more than a theory. It is the only salvation of Canada, and her only sure protection from national decay. But it may be answered we are a young country and there can be no danger for generations yet to come. Britain could truthfully say the same thing even less than a hundred years ago. It is high time that a mater of such vital importance should receive earnest consideration from every Canadian. Every day we have hundreds nay thousands of these streetbred, narrow-chested, plague spotted ones brought to our shores. The Canadian farmer does not want them. If one of them happens to be located on a concession line for a short period, it adds nothing to the moral tone of the young farmers residing there. While this country extends a kind welcome to immigrants from the old land of the agricultural class, the plague stricken brood of the slums without mental and moral stamina, we don't want.

With such evidence before us then there should be no doubt regarding what course we should pursue. Educate back to the land, or rather educate to remain on the land. The safety of the race demands it, the safety of the state demands it. The first duty of our Canadian Government should be, when such large sums are being spent on national development, is to see that Colleges are located in every section of Canada to prepare young Canadian farmers to occupy these lands which are being made available for settlement. There is no better blood in this world than can be found on a Canadian farm to-day. We have everything necessary in this country to build up a great nation, and it will be deplorable if every effort is not put forth, and every national agency employed to utilize those advantages, which race, creeds, climate and natural resources have placed at our disposal.

My Country, I would place thy feet
On greater heights than man ere trod;
Beyond where waves of error beat
Where men and angels yet shall meet
In everlasting brotherhood.

WORK AND RECREATION.

By Dr. Margaret McAlpine, Toronto.

Among the many evolutionary changes in thought and customs in the latter half of the nineteenth century, none is perhaps more striking than that which has come over the popular conception of work. Hitherto, work to many minds was synonymous with toil or drudgery, regarded as a curse or affliction to which the majority of mankind were subjected and from which they should escape if the change presented itself. The leisured classes were looked up to and perhaps envied, living as they did the lives of ladies and gentlemen who in their turn, more or less despised the people who worked and separated themselves as a distinct class, holding all kinds of work save that of a highly intellectual or specialized character as degrading. The caste system still obtains to some extent in many countries, the outcome possibly of the old feudal system when slaves did all the toiling. To-day, generally, an entirely different ideal prevails. Work of any kind is now recognized as a *Privilege*, as the greatest means we have for self-development and self-realization, bringing forth, as it does, latent powers and cultivating those stirling qualities which go to make up strong character, namely,—endurance, perseverance, patience, honesty and self-control.

All kinds of work are necessary for the world's progress—therefore all work is *dignified*, and the man digging a ditch or the woman scrubbing a floor is not to be looked upon as doing undignified or degrading work any more than the ruler of a country, because he or she is a *producer* each contributing something towards the world's advancement, without which it would be that much retarded. The only difference in work is a difference in responsibility, the more skillful and complicated work carrying with it the greater responsibility the degree of faithfulness is the same for all. Far from envying the person with nothing to do, the tendency of the age is to despise the idle woman and the man without a vocation as non-producers or parasites, tending to leave the world worse rather than better by their sojourn in it. Indeed the thirst of the present time is for activity and achievement. No man or woman, however, independent but feels the ceaseless call *to do something*, to stamp his or her personality however faintly upon the world before the allotted span of life has passed away.

Work may be divided into two classes: physical and mental with the subdivision,—mental physical. Physical work is done by the muscles which by their contractions use up a certain amount of their materials and at the same time give off waste products, the effect of which is to produce the condition known as *fatigue*. The more a muscle is used the greater is the blood supply to it, resulting in increased size and strength as is seen in the working man's arm or the athlete's heart. Mental work is one by the brain cells which also give off waste products causing brain weariness after a time. Increased mental work results in increased mental power up to a certain extent. When the water products from muscle or nerve tissue have been swept away by the blood currents after a period of rest, the feeling of fatigue passes off. Each kind of tissue is affected most by its own waste products. Thus the poisonous waste substances from the muscles are not the same as from nerve tissues, for after severe and prolonged bodily work, when the muscles are tired out, the brain may be clear and fresh, and conversely after heavy mental work, when the brain is fagged and weary, the muscles may be strong and ready for exercise.

During the performance of hard work whether physical or mental the blood pressure remains high. If this is kept up continuously for a long

time, as this strenuous age seems to demand, the penalty will surely follow. We all know from observation if not from experience, the too frequent result of excessive and long continued mental work, strain and worry in the nervous troubles of all kind and degrees that follow with all their attending miseries from simple neurasthenia to profound nervous exhaustion bordering on insanity. These come on so insidiously that mischief is frequently done to the body which may take years to repair before one is aware of its onset. In both physical and mental work carried to excess, the high blood pressure, the strain and the waste products tell first on the arteries, which sometimes as early as thirty-five or forty years, begin to show degeneration or hardening. "A man is as old as his arteries" is a truth we often hear, for the condition of our arteries and not the number of our years constitutes our age. Some people may be as old at forty as others at seventy in which case the hardened arteries may be inherited or may be the result of the wear and tear of the strenuous life they have lived. This sclerosis of the arteries causes old age by not allowing a sufficient supply of rich blood to feed the vital organs. Thus the brain cells may degenerate producing softening, the heart muscle may become sclerosed resulting in heart failure, the kidney tissue may become hardened constituting chronic Bright's disease. The digestion is poor and the lung tissue becomes devitalized rendering it an easy prey to pneumonia. Apoplexy is one of the most frequent results of arteriosclerosis. Sometimes, especially among women, work is allowed to become monotonous, the joys of life are one by one shut out, and as the years of mechanical grinding pass by, there follows a lack of force which not infrequently is a powerful factor in producing early brain degeneration and insanity. If health and longevity then are desired, one must learn early in life to provide for them as surely as for a competence in old age.

Probably one of the most regrettable results of too close attention to work, is the atrophy of the unused faculties that may occur. The capacity for enjoyment of the numerous blessings in life given for man's happiness may so scrivel up from lack of use, as to become almost or completely lost. One of our God-given gifts is the power of appreciating the beautiful in life. Yet very soon can this aesthetic instinct be lost by their being thrust aside and neglected in the eager rush for gain or success. It is said of Darwin, that when a young man, he was passionately fond of music, art and literature, but devoting all his time for many years to science to the exclusion of everything else, he found at sixty, that he had no taste whatever for these things, it having completely disappeared from want of use. "Born a man died a scientist" may be said of him as of the Frenchman on whose tomb were written the words, "Born a man died a grocer"—every instinct in him having died out but his passion for his grocery trade which he had spent his entire life in building up. Another gift is the social instinct, which needs cultivation also, or too soon it may slip out of one's life unawares. To gain love and acquire friends, to have the soul grow with the passing years requires sometime and care as surely as the gathering in of wealth does. Indeed he who toils unceasingly to gain a competence or success failing to gather life's roses by the way of neglecting the various faculties of heart and mind, stunting the soul, sacrificing friends is paying dearly for the material gains which are not to be compared with these spiritual possessions in giving happiness and satisfaction.

Nature has provided for the compensation of everything in life, so work should be inseparably connected with its counterpart-recreation. Recreation to be truly such must relax so as to relieve the strain and lower the blood pressure, and at the same time make the whole being experience a glow of pleasure. Indeed work itself may be made less exhaustive and

wearisome, may in short be in itself a kind of recreation if it be done with joy and enthusiasm. A sad and common sight seen all around us to-day is that of young men and women absolutely lacking in ideals, working away day after day as mere drudges, their only aim being to put in time. Inefficiency is another fault much in evidence. Parents failing to inculcate the highest ideals concerning work into their children are sending them out into the world greatly handicapped to become mere machines. Indeed if our young people were sent out into the world thoroughly trained for their vocation, filled with the highest ideals, and a greater sense of responsibility, not only would their success be assured, but they would escape from many of the worries and much of the nervous strain, and would find in their work a certain degree of pleasure and recreation.

During rest and recreation then, the esential thing is *relaxation*, else the high blood pressure and nervous strain remain as during working time. And how very few especially among women know how to relax? How often one sees the nervous high-strung woman resting but never relaxing save during sleep. She is not likely to throw herself comfortably into the easiest chair and thoroughly relax as a man generally does. Instead she more likely sits on the edge of a straight backed chair, it may be, every muscle held tense, the high pitched voice or closely-set mouth too plainly showing the nervous strain not yet thrown off. What is more enjoyable than to be in the presence of a soothing restful person. How quickly and subtly the influence is felt. On the other hand, how soon a nervous worried person infects mentally, by some strange, subtle, psychical means, it may be everyone in her midst. However, it is not always easy, indeed it may be impossible to throw off the thought of one's work and the strain and relax even when resting for anxious thoughts will intrude and keep up that tension one wishes to put aside. One of the best remedies for this is the cultivation of a hobby and that if possible early in life. Those engaged in mental work should have as a hobby or recreation sometimes along physical lines as sports, boating or driving, fishing, gardening, horticulture, or poultry raising. Walking is one of the most delightful forms of recreation so intensely enjoyed by the English, so neglected by Canadians. Begun mildly and gradually increased, long walks can in time be taken daily without causing fatigue even by those engaged in purely physical work. Nothing is so invigorating to the body improving health and beauty and nothing so stimulating to the artistic sense, the inauguration and other faculties of the mind, as a long easy tramp in the fields and woods in close touch with nature. Those engaged in physical work should have as a hobby or recreation something mental. Here, reading takes first place, which should be for information and mental culture as well as for interest and pleasure. Literature has boundless stores of keenest pleasure for those who will take the time and trouble to read it and study it and learn to love it. Music and art are useful and pleasure giving hobbies stirring the emotions and adding as literature does to the mind and soul's culture. Any hobby must hold the possessor's mind with intense interest so that every other thing is excluded from the mind when it is taken up. Only then can it be valuable as a recreation. Then as one grows older the interest in it becomes greater than ever, till ultimately it can replace one's work when the time comes to give that up. But it is useless to expect to cultivate a hobby late in life, it must be begun early and grow with the years. Sociability and the cultivation of friendship are delightful and abiding pleasures, taking one out of one's self allowing different phases of one's nature to be revealed or appealed to, and so broadens the mind and enriches the character.

Recreation, then, taken sensibly, systematically and enthusiastically, fills the mind and soul with pleasure leaving no room for cares and worries for monotony and early senility, for weariness, ennui or despair, but keeps the man or woman healthy in body, young in spirit with a capacity for enjoyment, increasing even when age and infirmities creep on and work must be laid aside.

THE PLACE OF THE HOG UPON THE FARM.

By G. E. Day, Professor of Animal Husbandry, O.A.C., Guelph.

The swine industry occupies a rather peculiar position in many localities. Swine multiply rapidly and come into use for breeding at an earlier age than other farm animals; consequently, it takes only a short time for farmers to increase or decrease their stock, as the case may be. When, owing to scarcity in the supply of hogs, the price for hogs goes up, we find farmers increasing the number of breeding sows, and in a very short time the supply of hogs coming to market increases to such an extent that the price is likely to break. If the decrease in price is very severe, the farmer becomes disgusted, and the chances are that many farmers will sell their breeding sows and practically go ut of the business. This unloading process adds to the burden of the market, and general demoralization is apt to follow. By-and-by, after the market has absorbed the excessive supplies thrown upon it, a scarcity occurs again, owing to so many having gone out of the business of hog raising, and prices once more reach a high level. This is a signal for farmers to rush again into hog raising, and overstock their farms in many cases, so that once more the market becomes top-heavy, and the history of the hog market repeats itself. Now, it is altogether probable that very few of those who were tempted to rush into the business on account of high prices obtained any profit from the venture. They paid high prices for breeding stock, but by the time they had hogs ready for the market, the decline in prices began, and before they were through they were selling out their hogs at a loss. The man who makes money out of hogs is the man who has hogs to sell when prices are high, whose farm is never over-stocked, nor yet entirely depleted of its supply. He knows how many hogs his farm will carry to advantage under average circumstances, and he practises a wise conservatism. When prices are high, he has a good profit, when they are low, his profit is small, but the average is fairly satisfactory. He may slightly expand or contract his operations at various times, but he never "plunges." The "plunger" is apt to find himself "in" when he ought to be "out," and "out" when he ought to be "in." The other man is "in" at all times, but never to such an extent as to be seriously damaged when the market goes wrong.

It is not the object of the writer to urge farmers to feed more hogs—far from it. Every farmer must be his own judge in this matter, and many farmers should never attempt to raise hogs, owing to the fact that either the man himself is not adapted to the business, or his conditions are unsuitable. Nevertheless, it is true that a few hogs might be kept profitably upon many farms where they do not find a place to-day. Generally speaking, the hog may be regarded as a by-product of the farm, or, in other words, he is a means of marketing the by-products of the farm. In the cattle feed lots, we find him utilizing the corn which the cattle have failed to digest and which otherwise would be wasted. In the dairy district, he is the means of obtaining good value for skim milk, buttermilk, and whey.

Where mixed farming is practised, he consumes any dairy by-products, small potatoes, and various other unmarketable substances, and gleans the stubble fields, returning to his owner cash value for subtances that are completely neglected on many farms. Even the cottager frequently utilizes him to obtain a cash return from kitchen refuse and table scraps. It is as a consumer of by-products and so-called worthless materials, that the hog shows to the best advantage from the standpoint of profit.

There is also another consideration. The farmer who raises most of his own feed is in a much better position to feed hogs, or any other class of stock, than the man who has to purchase all his feed. The farmer who grows his own feed may not get any more than market prices for the grain, or other produce consumed by the hogs, and may still have a fair profit through selling his produce at market prices in the form of pork; but the man who buys his feed can have for profit only what he obtains in excess of the market value of the foods consumed by the hogs. Thus the farmer who grows his feed has two sources of profit, namely, the grower's profit, or the profit obtained by selling his produce at market price; together with the feeder's profit, or what he obtains for his produce in excess of market price by selling it in the form of pork. The man who has to buy all the produce which he feeds his hogs can have only the feeder's profit, and under unfavorable conditions, this profit may be so small that it will scarcely pay for the labor involved.

Another point worthy of consideration is the fact that under favorable conditions and skilful management, young pigs can be raised for feeding at a lower cost than that for which they can be bought .

One of the great difficulties in connection with the swine industry is the fact that so many people are not content to engage in the undertaking except on a large scale, and the people who can handle hogs in large numbers and make the business a financial success are comparatively few. The average farmer is safer to handle hogs in rather small number, and use them as an adjunct to his other farm operations. Used in this way, and handled with a reasonable degree of judgment, the hog will give a good account of himself in adding to the revenue and the profits from the farm. A very few years' experience should enable a farmer to determine just how many hogs he can handle to advantage. Some farms will carry very large numbers owing to the system of farming which is carried on, but for many of the smaller farms, one breeding sow is plenty.

The hog fits in especially well upon dairy farms where skimmilk, buttermilk, or whey has to be fed upon the farm. Perhaps no animal will give as high returns for dairy by-products consumed, as the hog, and no food gives a finer quality of bacon than dairy by-products. It is also worthy of note that the man who has skimmilk is in a better position to raise pigs than the man who has none, for the reason that it is difficult to find a satisfactory substitute for skimmilk for young pigs just after weaning.

What has been said in the preceding paragraphs has no reference to the breeding of pure-bred hogs for breeding purposes, but applies simply to the production of market hogs. The breeders of pure-bred hogs understand their business, and know about how far their conditions warrant the extension of their operations, so that it would be out of place to offer suggestions to them along this line. It is true that the breeder of market hogs always has a use for pure blood, but it is not every perosn who can make a success of breeding pure-breds to supply the demand for breeding stock, and the average farmer is safer to adhere to producing market hogs.

To sum up, it may be said that the hog is especially valuable for consuming the by-products of the farm, and the number of hogs carried to

advantage upon a farm is governed very largely by the quantity and character of the by-products to be consumed. When carried in appropriate numbers, the hog is an exceptionally economical producer of meat, preventing waste, and giving cash returns for substances that are frequently wasted, or which have little market value. Trying to take advantage of fluctuating market prices by alternately over-stocking and under-stocking with hogs is seldom a financial success. The man who consistently follows up the business upon conservative lines, is the man who is well satisfied with the hog as a source of profit.

THE GROWING OF ROOT CROPS IN ONTARIO.

By C. A. Zavitz, Professor of Field Husbandry, O.A.C., Guelph.

That root culture lies at the basis of good husbandry is the candid opinion of many successful farmers of long experience. The root crop occupies an important place in a rotation, furnishes an excellent means for cleaning the land, prepares a splendid seed bed for a cereal crop, and supplies a large amount of succulent and palatable winter fodder which is rich in valuable food constituents which are easily digested by the animals. Roots assist greatly in the economical feeding of grain and coarse fodder, such as hay, straw, fodder corn and corn silage with which they are used. Root crops, in general, are much relished by all kinds of farm stock, but of special service are both swede and fall turnips for young stock and fattening animals; mangles for dairy cows, breeding ewes and hogs; carrots for horses; and sugar beets for cattle and hogs.

The growing of roots as a feed for farm stock has received much attention in many of the European countries. The root crop, however, has never been developed to the same extent in America, owing, no doubt, to the large areas devoted to corn in certain sections and to the adaptability of the soil to grain crops throughout a considerable part of both the United States and Canada. In the North-eastern States and in Ontario, Quebec and the Maritime Provinces, however, the field roots occupy an important place in the agricultural production. In some sections of America, the area devoted to the root crop is increasing from year to year. In order to illustrate this point, I would draw your attention to the increase in the area devoted to the mangel crop in the Province of Ontario. This increase can be observed from a study of the number of acres used for mangels in each of a number of the past years, as follows: 1882, 15,791; 1887, 17,924; 1892, 22,026; 1897, 41,175; 1901, 61,095; 1908, 67,937. During the same period of twenty-six years the area devoted to turnips increased from 78,823 in 1882 to 120,920 acres in 1908. Within the last few years, however, the area used for turnips has been decreasing, and that for mangels increasing to a considerable extent, owing, no doubt, to the greater development of the dairy industry, in connection with which the mangels prove more serviceable than the turnips.

Digestible Food Constituents per Acre from Different Kinds of Field Roots.

According to the reports of the Bureau of Industries for Ontario, we learn that the average yields per acre of our principal classes of field roots in Ontario have been as follows: Mangels (26 years), 460 bushels; turnips, (27 years), 429 bushels; carrots, (26 years), 346 bushels. If we apply the

best information which we have regarding the composition and the digestibility of the roots to the average yields here presented, we obtain the information embodied in the following table:

Classes.	Digestible matter, per acre (lbs.).		
	Dry matter.	Protein.	Carbohydrates.
Mangels	2,484	304	1,546
Turnips	2,934	257	2,188
Carrots	2,284	166	1,702

These results show that while the turnips stand the highest in the amount of digestible dry matter and of digestible carbohydrates, mangels are at the top of the list in furnishing a large yield of digestible protein. It should be mentioned that the turnips, as here reported, include both the swede and the soft varieties, but the latter are grown to a comparatively small extent in the Province of Ontario. The results here presented furnish some interesting information of a general character, but it should be kept in mind that in some parts of the country one class of roots will thrive admirably, and in another part of the country another class of roots will give more satisfactory returns.

Canadian Grown Root Seed.

Nearly all of the seed of field roots, which is used in Ontario, is grown in Europe. From certain preliminary experiments and observations which we made previous to the year 1905, we obtained the impression that root seed produced in this country was likely to give very satisfactory crops. During the last three years, we have carried on systematic work in the production of seed of mangels, swede turnips, and carrots, and have been testing the seed so produced with seed of similar varieties which has been imported. In the autumn of each of the past four years, roots were selected and stored during the winter and were re-planted in the spring. Some of each class of roots were pitted in the fall, some were stored in piles in the root cellar, and some were placed in sand. We have, however, found it difficult to pit a small quantity of roots and have the roots under the same conditions as those which have been pitted in large quantities. In the other methods of storing, we found we could obtain practically as good results when the roots were stored in loose piles in a cool cellar as when they were packed in sand, but there was less mould and sprout in the early spring from the latter than from the former method.

During the past few years, we have obtained some very good results indeed from home grown root seed. On the whole, the home grown seed proved to be a little higher in germination and seemed more productive of roots than the seed which was imported. The Ontario grown mangel seed surpassed the imported seed in yield of roots per acre in 1907, and again in 1908. In the autumn of 1907, the mangel seed did not ripen as evenly as in the year previous, some of the plants producing but little ripened seed. In the fall of 1908, however, all kinds of root seed matured very well, and the germination of the home grown mangel seed, in particular, is decidedly better than that of any of thirty varieties of imported seed which were sown this spring. We are at the present time extending our experiments in the growing of root seeds considerably, and hope to secure additional knowledgealong this line of work from year to year.

Selection of Seed.

Within the past few years, a large amount of experimental work has been done to determine the influence of different selections of seed upon the resulting crop. From the numerous experiments which have been conducted at our College on seed selection, only those bearing directly on the size of the seeds of field roots which were sown, are here presented. Four tests were made annually with the different selections of seed of the field roots. Duplicate experiments were conducted, in which the seeds of the different selections were planted separately, and duplicate experiments were also conducted by planting three large, five medium, and eight small seeds at each place where it was desirable for a root to grow. The plants were afterwards thinned, leaving one plant in each place and having the plants of the different selections of each class at an equal distance apart. When the roots were harvested, the yields of the duplicate tests of each method were averaged. The following table gives the average results of the duplicate tests made by means of each of two methods of comparison, in order to ascertain the amount of the influence of the size of root seeds on the size of the roots produced:

	Roots.	Number of years of tests.	Yield of Crop per acre. Large Seed. (tons).	Medium Seed (tons).	Small Seed (tons).
Plots in which equal numbers of seeds were planted separately.	Mangels.....	5	31.19	27.02	18.57
	Sugar Beets.....	5	23.25	21.32	13.48
	Swede Turnips...	5	15.35	12.63	7.03
	Fall Turnips.....	4	25.27	20.78	12.90
	Field Carrots.....	5	22.32	19.31	13.59
Plots in which equal numbers of plants were left when thinning.	Mangels.....	5	35.17	32.23	24.47
	Sugar Beets.....	5	22.54	22.37	15.05
	Swede Turnips...	5	18.77	17.85	10.40
	Fall Turnips.....	3	22.98	22.23	22.48
	Field Carrots.....	5	26.62	25.13	18.87

Note.—In the case of Mangels and Sugar Beets, the seed clusters instead of the separate seeds were used.

In the foregoing table, there are no less than ninety-four distinct experiments conducted with large, medium sized and small sized seeds of five distinct classes of roots. In fully eghty-five per cent. of the separate tests the larger seeds yielded more heavily than the smaller seeds.

Planting Root Seeds at Different Depths.

For several years in succession, we planted root seeds to the depth of ½ inch, 1 inch, 1½ inches, 2 inches, 3 inches and 4 inches, in order to ascertain the depth at which we might expect to obtain the best results throughout a series of years. The experiments were conducted on comparatively low land, and also on land of considerable elevation. The soil was what might be termed an average clay loam, and in no instance was it very light or very heavy. Level cultivation was used throughout. In each instance the experiment was conducted in duplicate for each of five years with mangels and sugar beets, and for each of four years with swede turnips and carrots. The average results show that with each class of roots the best

yields were obtained from sowing the seed at a depth of one-half inch below the surface. The following are the average results of the ten tests made in the five years with mangels, and represent the yield of roots per acre from each depth of planting: ½ inch, 23.6 tons; 1 inch, 19.8 tons; 1½ inches, 19.3 tons; 2 inches, 17.9 tons; 3 inches, 13.8 tons; and 4 inches, 6.3 tons.

Thinning Roots at Different Distances Apart in the Rows.

In each of five years, an experiment was conducted in duplicate by thinning mangels, fall turnips and swede turnips 4, 8, 12, 16 and 20 inches apart in the rows; and carrots 2, 4, 6, 8, and 10 inches apart in the rows. The rows were 3 1/3 links, or 26 2/5 inches apart in all cases. The average results of the experiments show that in almost every instance as the distances between the roots in the rows were increased there was an increase in the average size of the roots, but a decrease in the dry matter in the roots and also in the yield of roots per acre. Taking everything into consideration, the most satisfacory results will probably be obtained from thinning mangels, swede turnips and fall turnips to a distance of about ten inches, and field carrots to a distance of about five inches apart in the rows.

Quantity and Quality of Sugar Beets as Effected by the Distance Between the Rows.

An experiment was conducted in duplicate in each of five years by sowing sugar beet seed in rows which were made at different distances apart. Seven rows were sown in each plot. The outside rows were discarded and only the five inner rows were taken into consideration when determing the yield of the plots. The roots were thinned to a distance of seven inches apart in the rows. The Kleinwanzlebener variety of sugar beets was used throughout. Not only were the yields per acre determined, but the roots were also analysed in the chemical laboratory at the College, and the quantity and the quality of sugar was thus ascertained. The following table gives the average of the five years' results of the percentage of sugar, the purity of juice, the average weight per root, and the yield of roots per acre for each of the different distances allowed between the rows.

Inches between rows.	Percentage of sugar.	Purity of juice.	Average weight per root.	Yield of Roots per acre.
			(lbs.)	(tons)
12	17.1	85.7	.62	20.5
14	17.2	87.2	.65	20.2
16	16.8	86.4	.73	19.3
18	16.9	87.8	.80	18.9
20	17.0	86.3	.87	18.7
22	16.4	85.2	.94	18.4
24	16.9	87.3	.99	18.1
26	16.9	88.8	1.04	17.7
28	16.8	86.8	1 11	17.0

In Germany, where the sugar beet is used very extensively for factory purposes, the rows are made rather close together, being only 18 to 20 inches apart in many instances. By having the rows fairly close together and the plants quite near to each other in the rows, it is claimed that the largest percentage of sugar is obtained from the beets. Our results tend to

show that in this country, however, the composition of the roots, grown in rows at different distances apart, show but slight variations either in the percentage of sugar or in the purity of the juice. By having the rows comparatively close together, however, although requiring a greater amount of work, furnishes a larger yield of roots, and consequently a larger yield of sugar per acre.

Thinning Roots at Different Stages of Growth.

In thinning roots at different stages of growth in each of five years, it was found that those which were thinned when at a height of 1½ to 2 inches surpassed those which were not thinned until about 8 inches in height by the following annual yields per acre: Sugar beets, 1.3 tons; mangels, 2.6 tons; swede turnips, 2.2 tons; and fall turnips, 2.7 tons. In the case of carrots, the results were practically the same from the two thinnings. It therefore shows practically economy to thin roots when comparatively small.

Flat and Ridged Cultivation.

An experiment was conducted for five years with sugar beets and with carrots, and for six years with mangels, swede turnips, and fall turnips, in order to compare the results from sowing the seed on ridges, which has been the usual custom throughout Ontario, with sowing the seed on the level. The experiment with each class of roots was conducted in duplicate each year. The soil was what might be termed as average clay loam. The test was made in different locations throughout the Experimental grounds. The ridges used were made to a height of about 3 inches. In averaging the results for each class of roots, it was found that the land which was cultivated on the level gave a greater yield of roots per acre than that which was ridged before the seed was sown in the case of sugar beets, swede turnips, fall turnips and carrots. In the case of mangels, however, the results were rather in favor of the ridged cultivation. When the land does not contain a very large percentage of clay, it appears that the level cultivation will very frequently surpass the ridged land considerably in yield per acre of most classes of roots. If the soil, however, is comparatively heavy, it is quite difficult to grow the roots on the level without a considerable amount of labor.

Conclusion.

From the results of the experiments here presented, regarding the source of the growth of seed, the selection of the seed itself, and the influence on the resulting crop from sowing at different depths, from thinning at different distances apart and at different stages of growth, and from cultivating on the level and in ridges, should, I think, form a good basis for study and experiment on the farms where root growing enters into the rotation. I wish, in conclusion, to emphasize very strongly the point that good seed and proper cultivation is exceedingly important in root culture, as well as in the growing of other crops on the farm.

ACTION AND MOVEMENTS OF WATER IN SOIL.

By W. P. Gamble, B.S.A., Professor of Soil Chemistry, O.A.C., Guelph.

The object of this paper is to give a brief account of investigations which were carried on at the Ontario Agricultural College, for the purpose of studying the action and movements of water in the soil. An attempt will be made to point out the aplication of results and conclusions to the explanation and solution of problems in practical agriculture.

Of all the factors influencing the growth of plants, water is beyond doubt one of the most important. By virtue of its solvent power, it is the medium through which the solid substances in the soil are taken into the plant, conveyed to the appropriate organs to be digested, and then carried to the different parts of the plant to be used in the construction of tissue, or to be stored up for future use.

The water with its dissolved plant food (salts) is absorbed from the soil by the roots of the plants; and is then carried by the upward flow of the sap to the leaves. When it reaches the leaves, some of the water and all of the salts are retained for food manufacture. However, much more water enters the leaves than is neded for food, this excess having been used for carrying plant food from the soil. When the food has reached its destination the excess of water is evaporated from the leaf surface. This process of evaporation, called transpiration is regulated according to the needs of the plant. If there is an abundance of water, transpiration is rapid; if the water supply is small in amount, transpiration is checked.

Under ordinary conditions plants loose very large quantities of water by transpiration; hence, before we can thoroughly understand and appreciate the importance of the moisture which comes to our fields by natural atmospheric agencies, we need to know clearly what relation this amount holds to that amount which is actually required for the production of good crops of different kinds. Because of this need, investigations have been carried on at the different Experimental Stations on this continent to learn how much water is required to produce a pound of dry matter in some of our leading crops. The average of the results obtained are brought together in a condensed form below:

Table showing the amount of water required to produce one pound of dry matter, and the relation that experimental yields and water used bear to field yields and season's rainfall.

Crop.	Pounds of water required for one pound of dry matter.	Times the season's rainfall.	Times the field yield.
Oats	505.7	Water used was...2.8	And gave.... 2 6
Clover	453.	" " ...1.9	" 1.4
Dent Corn	310.	" " ...1.8	" 2.4
Flint	233.	" " .. 2.2	" 2.6
Barley	393.	" " ...2.7	" 2.7
		Average 2.28	2.34

The figures given are the average of a large number of carefully conducted experiments carried on by Prof. King at the Wisconsin Experiment Station.

From this table it is seen that under the conditions of the several trials the crop experimented with were able to utilize an average of 2.28 times

the water which fell as rain during the growing season, and that in having it to use yields averaging 2.34 times that of the field crops were obtained.

It does not, however, follow from these experiments that well tilled fields, if plentifully supplied with water, will in every instance produce such crops as are recorded in this table; neither does it necessarily follow that these large crops owe their excess over normal crops simply to the extra supply of water. Climatic conditions, the available plant food in the soil and manuring may also influence the yield of crops. But we may safely say that, were our water supply under better control, and larger at times, our field yields would be much increased. We are also justified in saying that all methods of tillage which are wasteful of soil water detract so much from the yield per acre.

Our first series of experiments were started with a view to discover the relative amount of water which soils of different kinds were capable of holding, and also to learn what effect the fineness of the particles had upon the absorptive power of soils. For this purpose zinc cylinders 2 centimeters in diameter and 18.2 centimeters long were filled with different kinds of soil, and the cylinders were then placed in a pan of water. The soils were prevented from passing out of the cylinders by means of wire gauze covered with pieces of linen fitted into the lower end of each cylinder. Before placing the cylinders in the water they were carefully weighed, so that the difference in weight before and after saturation represents the weight of water absorbed. The results of these experiments go to show that all soils are capable of absorbing and retaining moisture, but the extent to which this is done varies greatly.

TABLE SHOWING WATER CAPACITY OF DIFFERENT KINDS OF SOILS.

Sample.	No. 1 coarse clay	No. 2 medium clay.	No. 3 fine clay.	No. 4 sand	No. 5 surface clay loam.	No. 6 subsoil clay loam.
Weight of soil	grains 202	grains. 200	grains. 88.25	grains. 205.18	grains 209.5	grains. 208
Height of column	cm. 13.8	cm. 13.8	cm. 13.8	cm. 13.8	cm. 13.8	cm. 13.8
Area of cross section	11.345	11.345	11.345	11.345	11.345	11.345
Water co-efficient	.324	.463	.519	.282	.452	.409
Surface became moist in	1 hr.	9 hrs.	17 min.	12 min.	4½ hrs.	3 hrs.

The water co-efficient is obtained by dividing the volume of the water absorbed by the volume of the dried soil; the number of cubic centimeters which represents the volume of the water being the same number as that which expresses its weight in grains.

A brief examination of this table shows clearly that the water holding capacity of a soil increases with the fineness of its particles. This data also emphasises the necessity of plowing clay soils in the fall of the year. For when clay land is plowed in the fall the upturned surface is exposed to the action of the atmospheric agencies and the disintegrating action of frost. The soil is thus brought into a fine state of division, which greatly increases its water holding capacity, and when it is observed that heavy lands, after a dry season, seldom becomes fully saturated with water during the winter and spring, the importance of fall plowing in such cases can be appreciated.

It is a matter of common observation that seed sown on clay land, which has been plowed in the spring, will take a long time to germinate. This is true in all cases except when a shower of rain falls shortly after the seed has been sown. This fact can be explained only in the following manner: when a clay soil is plowed in the spring of the year, large clods form which prevent the rapid development of the root system, thus much of the food stored up within the seed is used up before the plant can derive any nutriment from the soil. Besides this, there is a deficiency of moisture within reach of the roots, which will tend to retard the growth of the crop, and if a dry season should follow, the crop will suffer severely from drought. If, however, a clay soil is plowed in the fall, the action of the frost on the water within the soil will force the particles apart, and thus the soil is left in the best possible condition to produce rapid germination of the seed, as the roots of the plant are its feeders, and all the water ordinarily used by it passes in through these channels, we can see at once the importance of having the soil in such a state of devision that the roots may readily make their way through it. The roots and rootlets of the plant, in burrowing through the soil, come into intimate relation with the soil particles, which hold a film of water in firm contact. The roots are thus surrounded by the soil water, a portion of which they are able to absorb. The water passes up through the plant, carrying with it soluble plant food, which is conveyed to the elaborating organs.

As already stated the plant's roots can absorb food only in the soluble form, and a large supply of mineral elements is required by growth. Therefore, not only is a large quantity of moisture demanded for the direct use of the plant, but its presence in the soil is necessary in order that the plant food may be rendered soluble, and it is perfectly evident from the figures given in the table that clay soil, if the particles are in a fine state of division, has the greatest power, other things being equal to meet these demands for water. The difference between medium cuay and loam is very slight, but the difference is in favor of the clay. Sand is generally supposed to have the lowest water holding capacity of any of our cultivated soils, but the experiment goes to show that its absorbant capacity is very little less than coarse clay.

At first it appears rather strange that the amounts of water held by the medium clay and loamy soils are so nearly alike, but the analysis of the loamy soil showed high percentage of vegetable matter, as well as a considerable amount of pure clay.

The most striking fact brought out by this table is that the water-holding power of the coarse clay is much less than that of the finer grades. An important practical lesson can be drawn from this connection with the practice of plowing heavy clay soils in the spring. It is well known that when wet clays are plowed in the spring, large solid lumps are apt to form, which are very troublesome to the farmer, in as much as they prevent the formation of a good seed bed. These large lumps of clay also constitute a clay soil of extreme coarseness which according to our table has very little capacity for holding moisture.

To study, the rate at which water will rise in soils of different kinds, four glass tubes three feet six inches long and three fourths of an inch inside diameter were supported in a vertical postion by a stand constructed for the purpose. The lower ends of the tubes rested in a zinc pan, in which water was kept at nearly constant depth. The samples of soil were retained in the tubes by stopping the lower ends with perforated rubber stoppers

over which were placed pieces of linen. The linen prevented the passage of the soil through the perforation in the stopper, while it permitted the free access of water.

All the soils were steam dried and sifted through a sieve containing 400 meshes to the square inch. The progress of the water upward by capillary attraction, as indicated by a change in color, was noted daily from December 27th, the date at which the experiment was started, to February 29th. The accompanying table shows the weight of the water at the end of each week, and also the weekly progress for the different soils. Each tube was weighed daily during the first two months that the experiment was in progress, but after that, the tubes were not again weighed until the close of the experiment.

TABLE SHOWING RATE OF RISE OF WATER BY CAPILLARY ATTRACTION IN DIFFERENT SOILS.

	Tube No. 1 Sand		Tube No. 2 Clay.		Tube No. 3 Loam.		Tube No 4 Loam. Sub-soil.	
	Height of water.	Progress during week.	Height of water.	Progress during week.	Height of water.	Progress during week.	Height of water.	Progress during week.
	Inches.		Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
December 29th	7 3/4	.....	2 1/8	.....	3 1/8	.....	3 3/4	.....
January 5th	reached surface in three days.		10 3/8	8 1/2	12	8 7/8	13 3/4	10
January 12th	.....	.....	15 3/4	5	16 3/4	4 3/4	17	3 1/4
" 19th	.....	.....	17	1 1/4	19	2 1/4	20 1/2	2 1/4
" 26th	.....	.....	19 1/8	2 1/8	21 1/4	2 1/4	22 5/8	1 7/8
February 2nd	.....	.....	20 1/4	1 1/8	23	1 3/4	24 1/2	2 1/8
" 9th	.....	.....	22 1/8	1 7/8	24 5/8	1 5/8	26	1 1/2
" 16th	.....	.....	24	1 7/8	26 5/8	2	27 7/8	1 7/8
" 23rd	.....	.....	24 3/4	3/4	27 7/8	1 1/4	29 1/4	1 3/8
March 2nd	.....	.....	26	1 1/4	28 5/8	7/8	30 1/4	1
" 12th	.....	.....	27 1/8	1 1/8	29 3/4	1 1/8	31	3/4
" 22nd	.....	.....	28	1/8	30 3/4	1	32 1/2	1 1/2
" 31st	.....	.....	28 3/4	1 3/4	32 1/2	1	33 3/8	1 1/8

A casual review of this table will suffice to impress one with the fact that when a soil is allowed to become dry, the rate at which it will lift water is then very slow, and it is because of this fact that surface tillage, which develops a dry layer at the surface of a field is so effective in checking the loss of water by evaporation. As has been stated before the tubes were standing directly in water during a period of over three months. It is thus seen that with dry soil standing directly in water, the time required to raise water through three feet of soil varied from three days, in the case of sand, to over three months, in the case of a heavy clay soil.

In this connection it is important to remember that plowing breaks the capillary connection between the surface and subsoil, then if a dry season should follow the evaporation from the surface is very rapid, and before capillary connection can be re-established, the surface soil will have lost much of the water it contained. This may mean the failure of crops on clayey land, which has been spring-plowed. Too much emphasis cannot therefore be placed upon this point in connection with the cultivation of clay lands. The cultivation of such soils before seeding should be deep, and thorough. All clods should be crushed, and the particles of soil made

as fine as possible. The finer the soil is made, the more food there is available, and the more moisture there is retained. The seed bed should be deep, clean, and moist, for the proper germination and growth of plants.

These very important facts may explain in a large measure the apparently paradoxical experience of crops suffering more from drought during dry seasons on undrained, than do those on drained land. When the subsoil is over-charged with moisture, the roots of the plants do not penetrate deeply into it, and the result is a large development of roots and over crowding near the surface. So when the plants become large and the demand for water is great, capillary attraction is unable to lift water from below as rapidly as it is used. Thus the soil towards the surface becomes too dry, and the crop suffers greatly from want of water when there is an abundance of it only a short distance below the surface.

On the other hand a well drained sub-soil permits the roots to penetrate deeply at the outset, and thus overcrowding is avoided. The roots, in this way, come in contact with a large volume of soil, and do not draw the water so rapidly from any one portion. This allows capillary action to hold the soil up to a degree of moisture at which the rate of the movement is rapid, and the crop is thus better supplied by utilizing water stored up more deeply in the ground. But this is not all. The surface roots, having been freed from the urgent need of gathering water, leave the surface soil more moist, and this allows the nitrifying process to go forward, which alone can furnish the plants with nitrogen. The keeping of the surface six inches at a proper degree of moisture is thus seen to be of the utmost importance, for it is within this zone that most of the nitrogen is elaborated.

That the distribution of water in the soil changes rapidly at times, so that one layer has gained moisture at the expense of a contiguous layer, has been demonstrated in the following manner. Two cylinders were filled with a mixture of sand and humus in the proportions of 80 parts of the former to 20 parts of the latter. The samples were then properly saturated with water, and allowed to stand for two days. At the end of the second day the surface of both samples was stirred to a depth of one inch, and again allowed to stand. In two days from the time of stirring the surface one of the samples was firmly packed, the firming was done in the evening, and on the following morning the surface of the packed soil showed unmistakable signs of moisture. This is simply an example of what occurs when land is rolled. The increase of moisture towards the top, which follows soon after rolling, results from increasing the strength of capillary action by bringing the soil particles in the firmed layer closer together, and as a result more water is brought up from below, which leaves the lower layer dryer than before rolling took place. It must not, however, be understood that rolling moistens the ground as a whole, for it does just the reverse. Experiments have shown that more water is lost from rolled than unrolled soil. The reason of this is that the surface soil of rolled land is warmer and the velocity of the wind is not checked by lumps of other unevennesses of surface. It is, therefore, good practice to follow the roller with a light harrow, which creates a sort of mulch and thus lessens the amount of water lost by evaporation. At the same time the previous firming of the loose soil increases the upward movement of the soil water, and thus brings the much needed moisture to the roots of the plants.

It has been observed that after a shower the soil at some distance below the surface becomes actually drier. Professor King in his valuable book, "The Soil," says: "The capillary flow of water may be so strengthened by a shower that the surface soil draws upon the deeper soil moisture at a more rapid rate than before, causing a translocation of the lower soil

moistnre, the lower soil becoming measurably drier." To obtain definite data on this point, we planned a series of experiments in which three glass tubes, each 12 inches long and $\frac{3}{4}$ inches inside diameter, were used. These were filled with soil obtained from the Experimental field. The soil was not dried before transferring it to the tubes. After this had been done a weighed quantity of water was sprinkeld over the surface of the soil in the tubes. Six hours after adding this water samples of the soil were again taken, and in every case it was found that the surface five inches contained from 1.8 to 2.5 per cent. more moisture than could be accounted for by the addition of the water to the surface, while the lower five inches had lost a corresponding amount of water.

These observations may be explained in the following manner: When the surface soil has reached a certain degree of dryness, water ceases to rise in it rapidly from below, as shown in the experiments on capillarity. Then when a shower comes, or, as in this case, water is added in sufficient quantities to moisten the dry soil up to a point at which capillary action becomes strong again, an additional amount of water is brought from the moist soil below. So that the surface layer has not only the amount which fell as rain, but an additional amount of moisture drawn from the sub-soil.

A very important practical lesson can be gathered from these facts. Suppose a hot, drying wind should follow the shower which has produced this translocation just described, the ground might in a few hours, be left drier as a whole than before the rain. Because not only the rain, but moisture from the sub-soil, which is caused to be brought to the surface might be lost. On the other hand, if the soil is stirred at the surface as soon after the shower as may be without injury to tilth, most of the water which fell as rain, and that lifted from the lower layers, will be preserved for the use of the crop. On no account, however, should the stirring be done when the soil is too wet, as puddling and subsequent baking are likely to follow as a result of such an operation.

The loss of water by surface evaporation from the soil is very large during the earlier portion of the growing season, and especially if the surface of the ground is left long undisturbed. The result of our investigations along this line will be placed in a tabulated form, so that we may compare the results obtained by stirring the surface with those of an unstirred soil.

Experiments in Evaporation.

	No. 1 stirred.	No. 2.	No. 3 stirred.	No. 4.	No. 5 stirred.	No. 6.
Weight at beginning	412.	401.	585.	360.	342.	390.
Loss in two days.....	9.1	11.	10.3	12.2	7.9	11.8
" during 5th day.....	3.3	4.	3.58	4.75	3.26	5.7
" " 7th "	2.1	3 2	2.52	3.41	2.50	5 81
" " 10th "	4.6	5.8	3.69	4.53	2.98	4.1
" " 14th "	2.1	3.2	1.96	2.48	2.00	2.3
Loss during 14 days	21.4	27.2	21.95	27.37	17.84	27.71

These figures show us the benefit to be derived from keeping the surface of the soil in a loose condition. It should be the practice to stir the surface soil just as early in the spring as conditions will permit, that a soil mulch may be formed which will serve to prevent the escape of water

from below. On clay soil it is of special importance that work be commenced early, and yet it is slowest in drying out, and last to be ploughed. Whey a clay soil is once saturated, it does not permit the water to pass off by percolation, and must wait till the sun's rays and winds have dried off the surface sufficiently to permit of its being worked. Then if the soil is plowed to any great depth, its capillarity is destroyed, and before it can again be brought into a condition favorable for the raise of water from below it will have become almost destitute of water to the depth to which it has been plowed. Then evaporation is a cooling process, and the soil, instead of becoming warm and of a proper temperature for the germination of seeds, remains cold and uncongenial as long as the wasteful process goes on. With sandy and gravelly soils the difficulty experienced in the spring is not so great. The water passes off by percolation, and the soil soon becomes warm and ready for the reception of seed. But moisture can be conserved better on clay lands, than on sandy lands, because the loss occurs chiefly through evaporation.

Thus it is that by a careful consideration of the figures given in the last table, we may arrive at a just appreciation of the effects of mulches in preventing evaporation from the surface of the soil, any process of tillage which destroys the capillary connection between the surface and the soil immediately underneath will aid materially in preserving the soil moisture for the use of the plants, and may in itself determine whether during season of drought, crops will succeed or fail.

Loss of Plant Food Through Leaching.

One great source of loss of plant food is the leaching that takes place after rainfalls and during winter. The following experiment demonstrated the value of humus as a preventative of this. Sand and humus were mixed in the proportions given in the table below, and in every case it will be seen that an increase in the per cent. of humus present in the soil resulted in an increased absorption of water.

Sample.	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	No. 6.
Proportion of Sand.....	100	90	85	75	35	50
" " Humus.....	.....	10	15	25	65	50
Weight of dry soil in grains.	122.65	106.18	90.43	77.17	.....	.....
Minutes which elapsed before water reached bottom of column.....	10	22	25	68	.....	.....
Area of cross section in Cm..	333.2	305.7	220.5	334.5	.....	.....
Water co-efficient.....	.309	.463	.494	.587	.....	.....

As before stated, the water co-efficient is obtained by dividing the volume of the water absorbed by the volume of the dry soil.

A very important conclusion to be drawn from the figures given is that the water content of the soil increases with its humus contents; and, hence, increased fertility and an increased water supply are obtained by one, and the same means, viz., by increasing the vegetable matter in the soil.

Another conclusion is the increased rate of percolation which results from a want of humus in the soil. The time required for the water to pass through pure sand was only ten minutes, while in the case of a sample of

the same soil mixed with ten per cent. of humus the time which elapsed before any water had reached the bottom of the column was twenty-two minutes. Hence, if soil be deficient in humus the rate of percolation is greatly increased. In this connection it is important to remember that the rapid percolation of water through a soil causes great loss of plant food, especially in the spring of the year. This loss is especially noticeable in sandy soils.

The two columns, No. 5 and No. 6 of the last table are left blank because the action of the water upon the humus caused it to expand with such great force that the tubes were broken before any water had reached the bottom of the column. As soon as the tubes burst we examined the soil critically, and, although a large quantity of water was absorbed, yet there was not the slightest trace of moisture on the external surface of the soil grains, showing that humus has the power of absorbing water within its soil particles, or, as plant physiologists would say, has the power of imbibition.

What has just been said with regard to the value of humus in sandy soils applies equally well in the case of clay, as the following figures show:

Sample.	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	No. 5.
Proportion of Clay.....	100	90	80	70	60	50
" " Humus.....	.....	10	20	30	40	50
Weight of dry soil.....	201.88	179.98	165.95	165.95	149.25	136.12
Height of column.....	13.8	13.8	13.67	13 92	13 8	13.8
Area of cross section.....	11.345	10,756	11.345	11.95	11.345	11.345
Time before reaching bottom						
—gain in volume %.....	.724	.181	5 79	7.24	9.42	10.85
Water co-efficient.....	.489	.535	.569	.559	.6404	.643

The gain in volume is simply the expansion or swelling of the soil under the action of water. This property of humus soils is of considerable economic importance. When the water dries out the soil is left loose and open, thus affording space for the air to circulate. Thus we see that the presence of humus in a clay soil creates not only the conditions most favorable for root development, but also produces the best condition possible for the absorption of water and, consequently of plant food brought down in the showers of rain.

As can be seen from the figures given above, clay soils expand also under the action of water, although not to so great an extent as humus soils; but the clayey soils possess great adhesive force, and on drying out forms solid blocks separated by wide cracks or fissures.

In this connection let us remember that, as the water dries off a clay soil, the soil particles will shrink and harden into compact masses, often injuring the roots of the plants. For the compact masses thus formed offer great resistance to the plant rootlets, and as these masses cannot readily be penetrated by air, but little plant nourishment can be withdrawn from them. Furthermore, the cracks caused by shrinkage are too large to favor capillary attraction, consequently, moisture is not drawn from the lower strata.

It is maintained by certain investigators that the fineness of the soil also exerts an influence on the amount of water evaporated from its surface. After the experiment just described, this question was studied. Six samples of soils (Nos. 1-6 in the accompanying table) were thoroughly dried

and placed in separate cylinders. Each soil was saturated with water, and the cylinders were placed out of doors in order to conform, as near as possible with natural conditions. Records were kept of the loss of water during several days. The following results were obtained.

Sample Description.	No. 1 Coarse Clay.	No. 2 Medium Clay.	No. 3 Fine Clay.	No. 4 Clay Loam.	No. 5 Sandy Loam.	No. 6 Sand.
Water content at beginning.	50.15	72 21	86.87	76.37	73.09	46.92
Loss during 3 days.....	9.97	10.60	10.94	11.63	12.27	12.82
" " 5th day.....	6.2	11 38	10.64	10.60	10.80	8.02
" " 8th "	5.8	4.47	5.88	4.92	3.95	4.83
" " 10th "	3.68	5.73	6.92	4.3	3.6	2.91
" " 10 days.....	25.65	32.18	34.38	31.45	30.62	26.58
Grains of water retained by the soil at the end of the experiment.....	24.50	45.03	52.92	44.55	42.47	20.34

It is evident from the figures given in this table that when the interstices are full of water the greatest evaporation takes place from the finest soil. But this is not all, for when a clay soil is once saturated it does not permit the water to pass off by percolation, and must wait until the rays of the sun, and the winds, have dried off the surface sufficiently to permit of its being worked.

Our final series of experiments was planned with the object of obtaining data on the rate of percolation through different grades of clay soil. The observations made fall in line with the common observation that rain falling on a hard compact clay soil is absorbed slowly, and much of it may flow off leaving the ground at a depth of a few inches unmoistened.

In the experiment mentioned, six cylinders of soil were allowed to become quite dry, then a measured quantity of water was poured over the surface of the soil in each cylinder, and a record was kept of the time required for the water to percolate through the soil. The water reached the bottom of the columns of loose clay in 5 minutes, but 27 minutes elapsed before any moisture made its appearance at the bottom of the columns of compact clay soil. During the next four hours the loose clay in the cylinders allowed 66 ccs. to pass downward from its surface in the same time that 15 ccs. were absorbed by the compact clay.

Table showing the quantity of water in ccs. soaked in through surface by the soils during four and one-half hours.

No. 1 Loose clay.	No. 2 Loose Clay.	No. 3 Loose Clay.	No. 4 Compact Clay.	No. 5 Compact Clay.	No. 6 Compact Clay.
ccs. 60	ccs. 69	ccs. 71	ccs. 15	ccs. 11	ccs. 19

These facts and figures make evident the reason of the increased fertility of clay soils after being properly underdrained. For when a well drained soil becomes dry it does not harden into compact masses, nor shrink and crack, but remains in a loose, porous condition. Thus during the night

the temperature of the soil is lowered by radiation, and moisture is condensed from the air. On the other hand, if the soil is compact and impervious to air, this moisture will be condensed on the surface only, but if by drainage it has been left porous, the moisture will also be condensed within the interstices of the soil.

Summary.

(1) All our agricultural plants obtain their moisture exclusively through the roots. Their leaves do not absorb water to any appreciable extent under normal conditions.

(2) In times of drought plants will not perish if they are able to develop roots which descend to sufficient depth. In order to bring about a strong and healthy root development the soil must be in a mellow condition. By this means we not only obtain the conditions most favorable for root development, but we also obtain the best conditions possible for the absorption of water, and consequently, of plant food brought down in showers of rain.

(3) The size of the particles and the moisture content of the soil, exert an influence on the amount of water transported towards the surface.

(4) Humus tends to prevent loss of plant food for sandy soils.

(5) Underdrains act beneficially in making soils porous above them, and thus increasing their permeability, and in removing the free water and thus allowing the access of air, which is as necessary as moisture.

(6) Deep plowing in the spring, especially if the soil is heavy, would tend unless prevented by early, heavy rains, to produce a deficiency of water for shallow rooted plants, and for deep rooted plants during the early part of the season, by partially cutting off the water supply at a depth below the roots. On the other hand fall plowing and early spring treatment with tools, like the disk harrow, tend to draw the water to the surface with the minerals held in solution, and thus concentrate the fertility at the surface for later use, and also prevent so much being lost by underdrainage.

GOOD ROADS.

To even the casual observer, it is a very noticeable fact that farmers of to-day are far more progressive than they were even ten years ago. The advance made by the Agricultural College, and the work done by the different Agricultural Departments go to show how the farmer is beginning to more fully realize the advantages of a better education in order to cope more successfully with the other professions. In all branches of science new things are being discovered daily and this means that the farmer in order to keep up with the times, must read all the best Agricultural literature so bountifully supplied to-day and not be slow to adopt those methods that prove their usefulness.

There is probably nothing in the rural sections of Ontario that has received so little attention as the question of road improvement. We have all been in such a hurry to enlarge our bank account that we have completely overlooked the comfort of a good road, the money that might be saved through wear and tear of wagons, buggies, and machinery; the advantage of being able to haul heavier loads thus saving time and labor; the value it adds to any property by having a good smooth road free from ruts and noxious weeds, to say nothing of the pride and pleasure it gives one when showing friends about the farm, to point to a good road approaching

your residence and especially so, if shaded by two pretty rows of shade-trees.

Like everything else, good roads cannot be established by adopting haphazard methods, the foundation, the material for construction, and drainage, all need careful consideration. As it is true that every farm needs special consideration, so it is with the roads. Yet, there are underlying principles which apply in every case. I wonder how many farmers have kept on file the Live Stock Association Report for 1908? In this report there is a very interesting discussion on the split-log drag, and good roads in general. It deals with the subject in a practical manner and should be of interest to every farmer in the Province.

A half mile of clay road in Caistor Tp., Lincoln Co., kept in good condition by the intelligent use of the split log drag.

The split-log drag is very cheap and simple in construction and should undoubtedly be more generally used throughout the country. Almost invariably where we find the split-log drag used, the roads have improved wonderfully. For the benefit of our readers we are including an illustration sent us by Mr. Jno. Jackson, which shows quite clearly what can be done by the intelligent use of this implement, also a letter from the same gentleman giving in a somewhat condensed form, some of his views as to road-making and the use of the split-log drag. Mr. Johnson writes in part, as follows: "The photo enclosed was taken in front of my house. It shows quite clearly what can be done with the split-log drag. The piece of road I have been working on is hard clay, one-half mile in length, and is really a model. All the work for the past two years has been largely done by the drag. In my opinion three blades in a split-log drag gives far better satisfaction than two; it is to the road as a jointer plane is in straightening a board. To my mind the great difficulty in road-making is that there

exists such a diversity of opinion as to how a road should be made, etc. We all have different ideas as to the width of drag to use, and width of turnpike, etc. It seems to me that this could be made a very interesting discussion at the Institute or Club meetings during the coming winter." There is nothing that helps more than a good road, to enhance the value of our property and help to make life worth living. Let us see to it that ours are among the best.

SILOS.

The rapid advances of dairying in its various phases has called the attention of the Dairymen to the question of Silos. Although at an earlier date, the Silo was severely condemned, this denounciation is no longer retained, because the principles upon which Silos and Silage are based are more thoroughly understood.

One need only talk with a few of our progressive dairymen to realize the value of Silage. Farmers are awakening to the necessity of keeping their animals as near to natural conditions as possible. The pasture in the summer affords this, but with the long winter season, in which the farmer is obliged to house his animals some substitute for this natural condition must be adopted. Silage answers this purpose admirably. It adds succulency to a ration, keeps the animals in a healthy condition, aiding digestion of the more concentrated foods by increased enyzmic action, as well as supplying a valuable food in a cheap form. Experiments carried on at Guelph Agricultural College, go to show that without Silage, milk is produced at a greater cost per pound, owing to the necessity of feeding a heavier grain ration in order to overcome the result of cutting out the Silage.

Summer Silage is rapidly gaining favor among dairymen who wish to keep up their supply of milk during the summer months, when the pastures are dry and bare. The marked decrease of milk during this time is very noticeable, and the cause is equally apparent, while the remedy is evident to all, it being to supply some food which is cheap, easily grown, and possessing the nutrient value of grass. Silage does this to better advantage than any other food or roughage known.

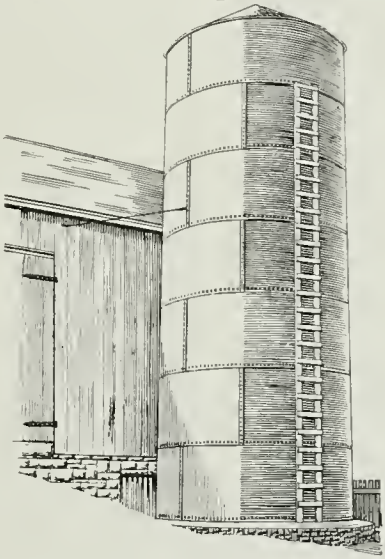
Regarding the question of Silos, the shape naturally presents itself first for consideration. There are three general types, viz: round, square and rectangular. The round Silos is the most popular because of its many advantages that make it worthy of consideration. It contains the least amount of waste space: possesses greater strength, equal pressure being distributed throughout, and in the question of capacity it requires less lumber for a given space. The square Silo may be built to an advantage in the corner of the barn. The chief disadvantage being the difficulty of packing the silage sufficiently to exclude the air at the corners, and unless this is accomplished, fermentative action is set up, which ultimately results in decayed silage. The rectangular silo, itself, has fewer advantages than the square, because of its numerous corners, which prevent the silage from compacting firmly.

There are numerous materials employed in the construction of silos, among the most commonly used are wood, concrete, cement blocks, and steel. Which to use will depend largely upon the money at the farmer's disposal, or his preference. Wood and stone will, undoubtedly, make the cheapest silo, and if properly looked after, will give satisfaction for a long time. The concrete and cement silos are rapidly gaining favor among those who have them, because of their lasting qualities. The steel silo is

practically unknown. The foundation is built of stone and cement with bolts set in the foundation at equal distances apart, with an 8 inch ring fastened with bolts to commence the steel with. The steel that comprises the walls is in sheets 54 inches by 10 feet long, rolled, punched and rivetted together. It is fourteen gauge steel, and a compound is used for coating the inside. This adheres to the side, and is harder than cement. The cost of a silo of this description (12 ft. x 37 ft.) is about $165.00, $21.00 for foundation, and $30.00 for labor, making in all $216.00. Just how popular this will become remains to be seen.

Inside Linings. Stone and brick should always be coated with Portland cement to a very smooth finish. If washed each year will last from 20 to 30 years longer.

Lathed and plastered silos have not been a success. They are inclined to crack, soften by the acid of the silage and become injured by the fork.



STEEL SILO.

On the farm of Mr. Jas. M. Boyd, Wentworth County, Ont. Size 12x37 ft. Capacity 200 tons. Erected September, 1908. The owner reports satisfactory results from last year; the silage saved first class and did not freeze to any extent.

Moisture gradually makes a passage through these blisters and injures the wood-work by decay. Sheet iron and roofing tin are not satisfactory for linings. The metal rusts even when coated with paint or coal tar. The action of the acid injures the efficiency of the paint. Roofing tins are usually coated with lead poisons. The Wisconsin Experiment Station experimented with two silos lined with metal, and it proved a failure. Two layers of boards with tarred paper between is considered to be a good lining. The first layer of boards should be placed, tarred paper applied, and boards placed perpendicular, especially so if the silo is rectangular. If the silo is round it is well to put the second layer on horizontally, taking care to break all joints. Boards ½ inch thick, and 6 inches wide are the most satisfactory.

The main thing of importance in the Silo floors is to make it firm, smooth and rat proof. It is always well to have the foundation built of stone or cement, and built in a trench to give drainage.

The silo should be well ventilated, as stagnant air collects moisture, decay sets in and in a few years the silo is useless. A suitable opening should be at the top.

A roof is only necessary when the silo is built out of doors, the cost being a matter of taste; the object being principally to exclude rain and snow. In building the roof the question of ventilaton must not be overlooked.

Capacity. The Capacity of a silo will depend upon the needs of the farmer. A cu. ft. of Silage under average conditions will weigh from 30 to 40 lbs. The latter being sufficient for one cow under ordinary conditions. If silage is fed 200 days in the year, a cow will consume 8,000 lbs. or 4 tons. For a round silo thirty feet deep, King gives the following diameters of a Silo, 30 feet deep for herds ranging from 30 to 100 head.

Cows.	Sq. ft. consumed.	Inside Diameter of Silo.
30	150	14
40	200	16
50	250	18
60	300	19.75
70	350	21.25
80	400	22.75
90	450	24.00
100	500	25.00

The depth of the silo is of considerable importance, and should not be overlooked. There are three striking reasons why it should be made as deep as practicable. (1) The largest amount of feed per foot can be stored in this way. (2) Less loss at surface during slow feeding, the silage being so closely packed air cannot enter readily from the top. (3) The downward and lateral pressure forces the silage so closely to the wall that the air is largely excluded, resulting in a silage of much better quality. The outward pressure increases at the rate of 11 lb. per square foot for every foot of depth.

In constructing a silo it is very important to have the horizontal dimensions such that the rate of feeding will be rapid enough not to permit moulding to occur, on the exposed or feeding surface. Feeding at the rate of less than 1-2 inches daily, moulding is liable to set in.

Crops for Silage.

Of the many crops grown for silage, experience has shown that only a few are well adapted for this purpose, those having solid stems will make silage with less unavoidable loss than those having hollow stems. Of the various crops grown, none seem so well adapted for the silo as corn, wherever it will reach maturity. The unavoidable losses with it are very small, heavy yields may be obtained with great certainty at a moderate cost; silage made from it has less objectionable features than when made from any other crop: it is not severe upon land.

The sweet corns do not make the best silage as the sugar tends to develop into acid. The large varieties of southern corn produce more roughage to the acre than do the small dents or flints but the silage is of an inferior quality.

Among the other crops grown are millet, clover, rye, oats, pea vines saccharine sorghum, non-saccharine sorghum, and alfalfa. If corn cannot

be successfully grown, some of these may be substituted, the kind depending on the climatic conditions. Pea vines are frequently used for ensilage when the peas are grown for canning purposes.

The state of maturity at which a crop is placed in a silo is important. Experience has proved that the nearer a crop is to maturity, the tissues being filled with sap, the better the silage fibre. Immatured crops do not possess sufficient fibre to retain the sap under pressure. Corn is in the best stage for the silo when the ears are fully matured, but the stocks, leaves, and husks are green. The sooner corn is placed in the silo after cutting the better. At this time the cells are alive, little air being present, and the possibility of fermentation being reduced to a minimum. If the crop

Cement Block Silo.

On the farm of Mr. Robt. Martin, Lincoln County. It is the intention to run the walls up somewhat higher than they are at present. It has given fairly good satisfaction, but would be better for plastering on the inside. The appearance of the block silo is decidedly more pleasing than that of solid cement concrete.

dries out, too much air is incorporated with the silage for its best keeping. Should it dry out, wetting is desirable, but it should be remembered that water can never take the place of natural juices.

Filling the Silo.

A slow filling is more preferable than a rapid, yet should not be too slow. A steady filling perhaps 8 to 15 tons for a small silo is preferable. A large silo may be filled in proportion. Danger in filling a silo is sometimes met with. Carbonic acid gas may develop to such an extent that it becomes impossible for a man to live in a silo. The presence of such is

shown by a lighted match being extinguished immediately. Before entering the machinery should be started, this causing a current of fresh air which will displace any poisonous gas. In filling a silo it is important that the silage should be thoroughly tramped, especially at the edges, as here, owing to friction, it fails to settle sufficiently to completely exclude the air. It should be tramped once a day, for three or four days after being filled, particular attention being given to the silage next the wall. Silage is frequently covered with some material a few days after it has been in the silo to assist in the exclusion of the air. Marsh grass or any substitute may be used. The grass is cut, spread evenly to the depth of 3 inches, tramped and wet at the rate of one pail to every square foot of surface. This will soon form an impervious layer which will totally exclude the air, and check the action of fermentation insuring silage of good quality provided it has been well matured and properly harvested.

Those who contemplate the building of a silo should study the question quite thoroughly. There are many important things worthy of consideration. Where a man possesses a thoroughly good silo, it is well to have it somewhat larger than is necessary for immediate demands, so as in a large measure to be unaffected by the variability of seasons. Silage may be carried from year to year with little loss, so that one is able, if he has a silo, to store a reserve of food in seasons of heavy crops to be used in seasons when they fall below the average. In this way one is not only independent of seasons but he is able to carry a much larger herd upon the same amount of land. Silage in a good silo does not appear to materially deteriorate with age: cases have been reported where it has been fed when six years old. For the above reason the silo has become an important factor in dairying during the summer season. During July and August when the pastures become dry, the Silage has been found to aid materially in keeping up the flow of milk, and the animals in a thrifty condition.

Enough has been said to explain the importance of a silo; as mentioned previously it has passed the experimental stage, and is proving to be a very important factor in stock feeding. It is only to be hoped that more farmers are made to realize the value of this food for adding succulency to a ration for stock, and indirectly increasing the bank account.

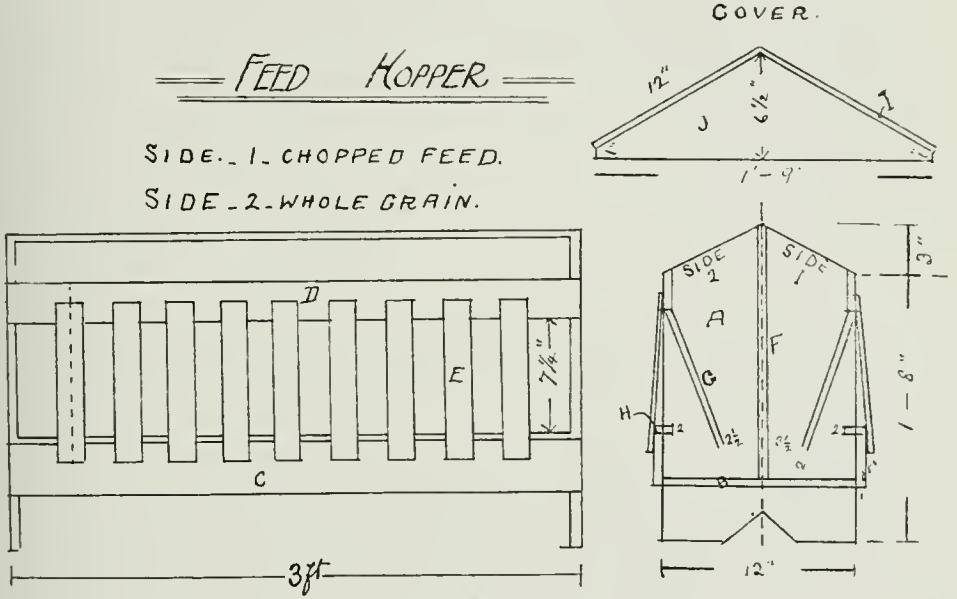
THE HOUSING OF POULTRY.

By W. R. Graham, Prof. of Poultry, O.A.C., Guelph.

The question of housing poultry has been given a great deal of attention by the Poultry Department, Agricultural College, Guelph, within the past few years. The object was to find a suitable house for the average farm in Ontario. The houses advocated for some years previous to this were quite expensive, too warm and not associated with a heavy egg yield. After a series of experiments with houses of different shapes and sizes it was proven quite conclusively that House No. 1 came nearest to the requirements. This house is 12 ft. x 14 ft., 4 ft. high at the back, and 6.5 ft. in front, the latter facing the south. It is built of single ply boards, the cracks being covered with battins. Nothing is used to line this house, the battins being sufficient to keep out the draughts and cold. In the front of the house is a horse manure pile. It is covered (loosely) with boards to keep out the snow. This affords an opportunity for the fowls to get sufficient exercise, and incidentally to keep them healthy. Fresh supplies of manure should be added every two weeks as it soon becomes compact, and not so well patronized by the fowls.

An opening about 3 ft. square connects the manure shed with the house. This opening was never closed, the fowls being allowed to go out or in at their will.

The fittings of this house are very simple only the roosts, nests and feeding apparatus being supplied. The roosts are elevated about 8 inches on dropping boards, the dropping boards themselves being about 2 ft. from the floor. The latter is quite important as heavy birds will suffer somewhat from sore feet if compelled to jump any distance. The nests can be arranged on the floor near the wall in any convenient place. The style of nest will depend largely upon the poultry owner. For ordinary purposes small sized boxes may be used with satisfaction. However, if it is desirous to study the individual hens, trap nests may be used.



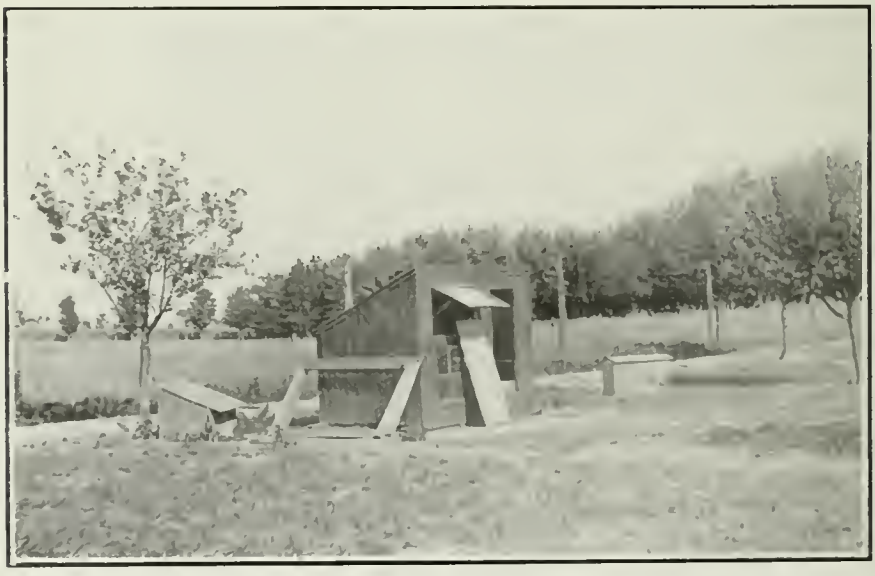
Bill of Material.

A. 2 ends $\frac{7}{8}$ x 12″ x 1′—8″	*F.* 1 division $\frac{1}{2}$ x 16″ x 2′—10$\frac{1}{4}$″
B. 1 bottom $\frac{7}{8}$ x 12″ x 2′—10$\frac{1}{4}$″	*G.* 2 " $\frac{1}{2}$ x 9$\frac{1}{2}$ x 2′—10$\frac{1}{4}$″
C. 2 sides $\frac{7}{8}$ x 3$\frac{3}{4}$″ x 3′—0″	*H.* 2 pieces $\frac{1}{2}$ x 1 x 3′—0
D. 2 sides $\frac{7}{8}$ x 2$\frac{1}{2}$″ x 3′—0″	*I.* 2 " $\frac{1}{2}$ x 12 x 3′—2″ } Cover.
E. 18 pieces $\frac{3}{8}$ x 1$\frac{5}{8}$ x 10″	*J.* 2 ends $\frac{7}{8}$ x 6$\frac{1}{2}$ x 1′—9″ }

For feeding the fowls a hopper in the centre of the house seems to be the most satisfactory method. It is an economical way of feeding as well as saving in labor. Fresh water is an important consideration and should always be supplied near the feeding apparatus. Open pans are not very satisfactory for this purpose as the fowls are inclined to walk through the water and make it unfit for drinking. There are several kinds of water fountains on the market. The kind to use will depend largely upon the individual. It is also well to have a dust bath at all times as it aids greatly in keeping down vermin which is a very important consideration in successful poultry keeping.

A large window facing the south completes the house, making it in all a cheap house, supplied with sunlight, fresh air, comfortable and good facilities for feeding and care.

A low down single ply board house with straw loft; one half the front is never closed; no cotton or curtain front used. This house gave good results during the winter of 1908-9 both in health of stock and egg production.



A colony house in the orchard. This house can be moved from field to field and has given good results for early and late chickens.

The above illustration shows how it is possible to produce two crops in one season, viz.: apples and chickens. This is one of the best places to grow strong, healthy chickens at a very low cost.

No. 1 Colony House.

In the foreground can be seen the run that is supplied with fresh horse manure and covered loosely with boards to keep out the snow.

In order to show exactly what can be accomplished when fowls are kept in a house of this description, we give here the result of an experiment with 25 May and April hatched Wyandottes:—

Eggs laid during eleven months—Nov. to Sept., inclusive—were as follows:—

November	17	eggs, value @ 3c		$ 51
December	95	" " @ 3c		2 85
January	358	" " @ 3c		10 74
February	280	" " @ 2c		5 60
March	320	" " @ 2c		6 40
April	377	" " @ 1.5c		5 65
May	311	" " @ 1.5c		4 66
June	377	" " @ 1.5c		5 65
July	301	" " @ 2c		6 08
August	266	" " @ 2c		5 32
September	194	" " @ 2c		3 98
		Total value		$57 44

Food consumed during this period.

Wheat	9.3	bush. @ $1.00		$9 30
Corn	311	lbs. @ 1.5c. per lb		4 66
Oats	177	" @ 1.5c. "		2 64
Ground grain	255	" @ 1.5c. "		3 83
Meat	116	" @ 3c. "		3 48
Clover, gravel and roots				1 00
				$24 91

It will be seen from the above statement that from the eggs produced by the 25 pullets, $57.44 was realized at a cost of $24.91, leaving a balance of $32.53 as payment for services and interest on money invested. The results of this experiment only go to impress those interested in the poultry business with the importance of natural conditions and especially the necessity of fresh air and exercise for the best results. These pullets were not selected according to their parents' egg yield, as may be learned from the fact that the yield ranged from 19 to 211 eggs.

The fowls in this pen were exceptionally free from sickness during the experiment. Four hens died, one from canker in the throat, two died laying in the nest—supposed to be caused by bursting of a blood vessel—and one dropped dead due to fatty degeneration.

In conclusion we only wish to add that the day of the costly poultry house, with heating equipment, and various attachments, is a thing of the past. Those wishing to attain success in the production of eggs will do well, when building, to give the style of house described above, some thought before adopting another. The hen is a good investment but she must be kept as close to nature as possible if best results are to be attained.

Late and Early Hatched Pullets as Layers.

There are many factors to be considered when one is trying to produce eggs during the winter months. There are the breeds and the various families of the same, housing, feeding, etc., but I purpose to deal with but one, and one that is generally overlooked by many. I wish to call the reader's attention for a moment to the eggs laid by April hatched pullets as compared with June hatched pullets. I mean by April hatched birds, chicks hatched

any time during that month. The pullets mentioned below were not all hatched during the early part of the month—many were near the last, but the June birds were nearly all hatched during the first ten days of the month.

These pullets are all sired by one male and were raised as nearly alike as possible. They have all lived in the same house since last October and have been fed the same fooods, etc., in fact, they ran in the same pen, so that the conditions were as near alike as we could reasonably hope to get them. There are 31 April pullets and 21 June pullets.

Our trap nest records show the average egg production for the April pullets to be 77 eggs each and the June pullets 48 eggs each.—that is from November 1st, 1908 to July 1st, 1909, but this is not all, for the June pullets did not begin laying before January and they failed to produce any eggs during two months of the year when eggs sell at high prices.

The cost of feed for the flock during the time given above was nearly 70 cents per bird: This would mean that a dozen eggs laid by the April pullets would cost a trifle less than 12 cents per dozen, whereas the June pullets' eggs cost about 17.5 cents. I say, about, for the reason that a laying hen eats more than a non-layer, but an immature pullet eats more than a mature non-layer so that our figures are not far astray.

An analysis of the November, December and January records show that the April pullets produced double the number of eggs produced by the June pullets during the same period. Owing to the greater value of the eggs during the three months above mentioned it means a much greater profit per hen for the April birds. The June pullets may produce equally as many eggs during the laying season but they have a greater tendency to be summer layers. Eggs at this season of the year are quite plentiful and not so profitable to the owner.

The differences in egg production are as great as we get between kinds of houses, laying strains, etc., and, therefore, we should try to get the pullets hatched early.

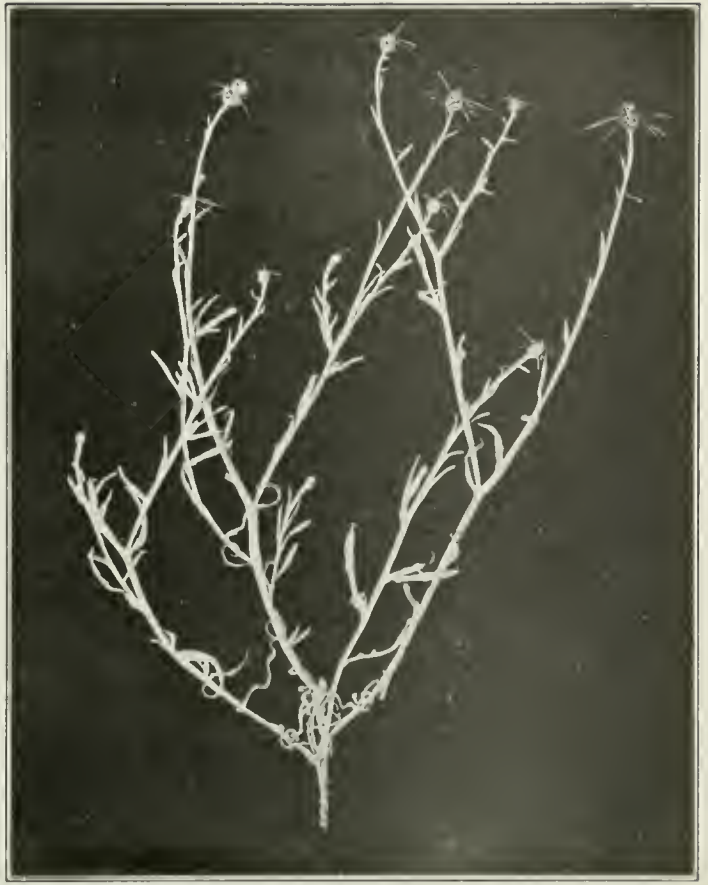
SOME NEW AND AGGRESSIVE WEEDS IN ONTARIO.

By J. E. Howitt, Lecturer in Botany, O.A.C., Guelph.

It is an undeniable fact that weeds are increasing in Ontario and that the weed problem is yearly becoming more serious. This is largely due to the fact that too many men neglect a weed until it becomes established on their farms and begins to prove itself a pest. By this time its foothold is so secure that its eradication is often almost impossible and it remains to levy a yearly toll of difficult, tedious and costly labour. It therefore behoves all who desire to have clean farms to keep a close watch for new weeds in order that they may be attacked and destroyed before they become established. During the past two years several new weeds have been introduced into Ontario, and a number which have been in the Province for some years have made their appearance in new localities where they are little known and where they are likely to secure a foothold before their noxious characters are recognized. In this article the writer wishes to call attention to the worst of these weeds and give descriptions which will enable those interested to recognize them if they find them on their farms.

Roquet (*Eruca sativa*). This is a weed which appeared for the first time in Ontario in 1907. It was undoubtedly introduced as an impurity in Alfalfa seed. In 1908 several reports were received of its occurrence in

Roquet, a new mustard in Ontario.



Barnaby's Thistle.

alfalfa fields and this year it has been sent in for identification quite frequently and appears to be widely scattered over the Province. Insomuch as it is a strong grower and a free seeder it is very likely to become a bad weed. In some parts of Europe it is considered a very serious pest. It is therefore very important that a sharp watch should be kept for it in order to prevent its becoming established on the farms of Ontario.

Description. Roquet belongs to the Mustard family and at first glance might be mistaken for Wild Mustard or Charlock. A closer look, however, would show it to be very different, the leaves being deeply pinnately lobed and the flowers light yellow, with the petals distinctly purple-veined like those of the Wild Radish. The pods are very characteristic, their upper third being a flat empty beak.

Eradication. Wherever this weed appears sparingly scattered in alfalfa fields it should be hand-pulled before the seeds mature. If allowed to seed the early cutting of the Alfalfa the next season will probably destroy most of the plants before they mature their seeds. Where it is practicable, early after-harvest cultivation should do much to rid the land of this weed.

Russian Thistle.

Russian Thistle (*Salsola Kali*, var. *tragus*, Mog.) This weed has been in waste places in many parts of Ontario for several years but until 1908 was not reported as occurring to any extent in cultivated crops. In 1908, however, it was widely scattered over the Province as an impurity in Alfalfa seed and its appearance in alfalfa fields caused considerable alarm to those who were not acquainted with it. It is a conspicuous annual weed and not likely to become serious unless neglected and allowed to seed.

Description. The Russian Thistle is a smooth, bushy branched, conspicuous annual from 1 to 3 feet high. Mature plants are more or less spherical in form and when ripe they break off at the surface of the ground and are rolled long distances by the wind, scattering their numerous seeds on their journey. It is this tumbling habit that makes them such pests on the treeless, unfenced prairies of the West. The stems and branches are

red in color. The leaves are awl-shaped, one or two inches long, soft and fleshy when young, very prickly pointed when mature. The flowers are small and inconspicuous. The seeds are frequently found in Alfalfa. They are dull grey in color, obconical in general outline and about one-twelfth of an inch long.

Eradication. Watch should be kept for this weed especially in alfalfa fields in order that the plants may not be allowed to mature seed. One or two plants may seed down a whole field but as the plant is very conspicuous this is not likely to happen if a little care is practised. If a field is neglected until it becomes seeded, frequent plowing will be required in order to clean it.

Barnaby's Thistle (*Centaurea solstitialis*, L.) This is another weed which we believe is almost new to Ontario. Its home is in the Mediterranean region but it is now found nearly everywhere that Alfalfa is grown. It was found for the first time last year in an alfalfa field of the College farm. Several specimens were also sent in by correspondents who reported finding it in their alfalfa fields. It has undoubtedly been dispersed as an impurity in alfalfa seed. It is an annual and very conspicuous, therefore not likely to prove troublesome but, as its appearance often causes alarm, it is dealt with here.

Description. Barnaby's Thistle is a bushy branched annual weed from one to two feet high. It belongs to the Composite Family (Compositae). The "flowers" are yellow and surrounded by conspicuous, stout, yellow spines, about $\frac{3}{4}$ of an inch long. The whole head is more or less woolly. The lower leaves are deeply cut and the upper are entire and run along the stem at the base.

Seeds of Stinkweed or Penny Cress. (Magnified about 12 times.)

German Knotgrass (*Scleranthus annuus*, L.) This is a small, low, reclining plant which the writer has found growing as a weed in several parts of Ontario during the past summer. Those who have had experience with it claim that it is very hard to eradicate.

Description. It is a low, spreading annual plant with a stiff forking stem and narrow pointed leaves often appearing to come out in whorls. The flowers are borne in clusters in the axils of the leaves. They are incon-

spicuous, being without petals, small and greenish. This being an annual weed it is not likely to become a serious pest on well cultivated farms. A properly cared for hoed crop should rid a badly infested field of this pest.

Field Pepper Grass or Cow Cress (*Lepidium campestre*, Br.) This is a weed which during the past two years has been widely distributed over Ontario as an impurity in red clover seed. It is a free seeder and likely to become very abundant if neglected, though not likely to become serious in well cared for fields.

Description. Field Pepper Grass or Cow Cress is an annual or biennial weed belonging to the Mustard Family (*Cruciferae*). It grows from one to two feet high and bears long clusters of white or yellowish-white flowers which develop into small boat-shaped seed pods, which are borne on stiff pedicels of about their own length. The seeds are reddish-brown in color, about 1/12 of an inch long, egg-shaped, rounded or somewhat flattened, and the surface is granular and scurfy.

Eradication. Care should be taken not to sow clover seed contaminated with the seeds of this weed. Small patches should be hand pulled. Clover should be cut before the plants ripen their seed. Fields badly overrun with this weed can be easily cleaned with a hoed crop.

Stinkweed or Penny Cress (*Thlispi arvense*, L.) This is a weed which is by no means new in Ontario but one which is so rapidly gaining ground it is worthy of attention here. It appears to be spreading through the agency of ground feed made from Western screenings and to some extent as an impurity in farm seeds.

Seeds of Bladder Champion or Bladder Weed.
(Magnified about 12 times.)

Description. Stinkweed or Penny Cress is an annual or winter annual belonging to the Mustard Family (*Cruciferae*). It is a foul smelling plant, from 1 to 2 feet high, bearing clusters of small white flowers which develop into flat orbicular pods with a notch at the upper end. It is from these peculiarly shaped pods that the plant gets its common name, Penny Cress. Each pod contains about a dozen seeds. The seeds are about 1/14 of an inch long, flat, irregularly oval, bronzy brown to metallic black in color with regularly arranged curved lines on both surfaces.

Seeds of Tumbling Mustard. (Magnified about 20 times.)

Tumbling Mustard. (Note the large number of seed pods.)

Eradication. Hand pull and burn when in small quantities. Badly infested fields should be given thorough early after-harvest cultivation. If a growth of weeds appear in the spring, plow and harrow the land and sow late to a green feed crop or keep under clean fallow if the land can be spared. Never plow down plants with fully formed pods as the seeds will mature below the ground and maintain their vitality for considerable time.

Bladder Campion, Cow Bell or Bladder Weed (*Silene inflata*, L.) This is another weed which is by no means new to Ontario but, as it is a very serious pest and one which is constantly appearing in new localities where it is not known, it will not be out of place to deal with it here. It is being spread chiefly as an impurity in clover seed. The seeds resemble very closely the seeds of Night Flowering Catchfly and White Cockle, for which they are often mistaken.

Description. The Bladder Campion or Cow Bell is a deep-rooted, freely branching perennial weed belonging to the Pink Family (*Caryophyllaceae*). It grows from six inches to two feet high. The leaves are smooth, ovate-lanceolate, in pairs, with their bases meeting the stem. The flowers are white and borne in clusters. The "flower cup" or calyx is conspicuously inflated and looks like a bladder. It is from the bladder-like calyx that the plant derives its common name. Bladder Campion and Bladder Weed. Large quantities of seed are produced which mature from July to September. They are about 1/16 of an inch in length, irregularly kidney-shaped. light grey to dark brown in color, the surface covered with regularly arranged rows of tubercles. Typical seeds show a marked depression at the scar. This characteristic and the more conical shape of the tubercles make it possible for a careful observer to distinguish them from the seeds of Night Flowering Catchfly and White Cockle, which they resemble very closely.

Eradication. Avoid buying clover seed containing the seeds of this pest. Small patches should be dug out as soon as they appear, taking care to get every piece of the root and rootstock. A good sized plant will have a root over two feet long with numerous root-stocks, digging them out is a tedious task. Badly infested fields require to be plowed deeply immediately after harvest and then thoroughly cultivated and cross cultivated with a broad-shared cultivator. The following spring continue this deep cultivation at intervals of about two weeks, until it is time to put in a hoed crop, which must be kept thoroughly clean in order to be effective. Such treatment has been found to be most effective in dealing with this weed.

Tumbling Mustard (*Sisymbrium altissimum*, L.) This Mustard, which is troublesome in the West, is now found in many parts of Ontario though it has not yet become a pest in cultivated fields in this Province. The fact, however, that it produces great quantities of seed indicates that if neglected it may become a serious nuisance. It is therefore advisable that a watch be kept for it in order that any plants which appear in cultivated fields may be destroyed before they mature their seeds.

Description. Tumbling Mustard is a bushy-branched annual or winter annual, from two to five feet high. The lower leaves are pinnatifided with the segments pointing backward (runcinate); the upper leaves are very variable in size and outline but are all deeply pinnatifided with narrow segments. The flowers are numerous at the end of the branches, pale yellow, and about 1/3 of an inch in diameter. They are succeeded by long slender pods, each of which contains numerous seeds. The plants, when mature, break off near the surface of the ground and are rolled about by the wind, scattering their seeds as they go. It is from this tumbling habit

that the plant gets its common name, Tumbling Mustard. The seeds are very small, less than 1/24 of an inch in length. They are greenish yellow to olive brown in color and somewhat V shaped. Being so very small they are not readily crushed by grinding and thus frequently find their way unharmed into chop. It has been estimated that a single plant may produce a million and a half seeds, but fortunately they do not appear to have the vitality of the seeds of Field Mustard.

Paint Brush, Devil's Paint Brush or Orange Hawk Weed (*Hieracium aurantiacum*, L.) This is another weed which is steadily gaining ground in Ontario. A few years ago it was not found to any extent except in the eastern part of the Province; now it is quite abundant in many parts, being found as far west as Oxford County and as for north as Muskoka. It is a shallow rooted, creeping perennial and not a serious pest on well cultivated fields. In meadows and permanent pastures, especially on dry, rocky and hilly land where cultivation is impossible it is a troublesome pest as it soon crowds out the grass and destroys the pasture. In is dispersed as an impurity in clover seed, and by means of its tufted seeds which are blown about by the wind.

Description. It is easily recognized by its orange red "flowers" which are about 2/3 of an inch in diameter and borne in clusters on the top of a simple nearly leafless stem from 12-18 inches high. The leaves are all basal and lie close to the ground forming rosettes. They are broadly lance-shaped, from 2-6 inches in length and somewhat hairy. Slender runners are produced which lie close to the ground and by means of which the plant soon spreads over a field crowding out the grass. The seeds are sometimes found in clover seed. They are torpedo-shaped, about 1/12 of an inch long and ribbed lengthwise. Ripe seeds are dull jet-black in color; unripe seeds are deep red.

Eradication. Keep a close watch on all clover seed for the seeds of this weed. If a small patch is noticed in a field is should be carefully dug out or sprinkled with salt before the seeds mature. On hilly or rocky land where cultivation is impossible it has been found that salt at the rate of 1-1/2 tons per acre sprinkled on the leaves will destroy the weed and at the same time improve the grass. In fields which can be broken up and put under a short rotation of crops this weed will not be troublesome.

In closing the writer urges all interested in clean farming:

(1) To make themselves acquainted with the appearance and habit of growth of the worst weeds in the Province, in order that they may attack and exterminate them when they first appear upon their farms. If a strange weed appears, send a sample to the Ontario Agricultural College at once, and ascertain its name and nature. Do not wait until it has gained a foothold.

(2) To take every precaution to secure pure clover, hay and grain seed. When buying seed of any kind spread a sample of it out on a clean white sheet of paper and look carefully over it with the aid of a hand lens or tripod magnifier. If weeds are observed the seed should not be purchased until a sample of it has been sent to the Botanical Department of the Ontario Agricultural College, Guelph or to the Seed Department, at Ottawa, for inspection. In order to aid farmers and others to test their own seed as to purity the Botanical Department of the Ontario Agricultural College will furnish at cost (twenty-five cents) cases containing the weed seeds covered by the Dominion Seed Control Act 1905 and ten other weed seeds frequently found in clover and grass seed.

(3) To cut the weeds on the roadsides and head lands, and in the meadows and in fence corners before they mature and distribute their millions of seeds far and wide.

(4) To guard against using chop or rough feed containing numerous weed seeds, many of which may go out on to the fields in the manure with their vitality unimpaired.

(5) To organize and co-operate in dealing with such weeds as the Perennial Sow Thistle. Without the co-operation of the farmers in a district it is almost impossible to deal with such pests as a few plants in a neglected field may restock all the farms in the neighbourhood as fast as they are cleaned by proper methods of cultivation.

(6) To avoid cropping more land than can be properly cultivated. Fields broken up and put in crop and then neglected for want of labour are but propagating beds for weeds. They would yield better returns if seeded down and pastured, and at the same time weeds would be held in check.

CARE OF FARM MACHINERY.

By Prof. J. Evans, O.A.C., Guelph.

There is no more important question for the farmer than that of motive force and machinery to perform the general work of the farm. As an adjunct to farm operations, labor-saving machinery on the farm has become exceedingly important, for mainly through it, owing to economic conditions, can the farmer hope to reduce the cost of production, to look forward with confidence of accomplishing his seeding or to reap the reward of his labors by being able to independently gather in his crops. With efficient machinery a farmer can successfully, quickly and economically harvest his crops. Hence the proper care of farm implements and machinery is a matter of great importance not merely to insure the greatest possible efficiency of the implements, but also to prolong their efficient working life as well as to reduce the cost of maintenance.

The period of useful service of many farm machines through sheer neglect and indifference one might almost say wanton wilfulness in many cases, is reduced to a minimum. Indeed, so far as the farm equipment is concerned, there is much economic waste going on from day to day on the average farm that would not be tolerated for one moment in any workshop or factory of any pretentions. And a little wholesome economic philosophy of the type of "a place for everything and everything in its place," and "a use for everything and everything ready for use" would naturally contribute to increase the bulk of the farmer's wallet: save a lost temper and establish an equanimity that produces that variety of smiles usually attributed to Sunny Jim—the "smile that won't wear off."

Coleman, the great mustard manufacturer, said "It is not the amount of mustard people eat that makes me rich, it is the amount they leave on their plates." So might the farm implement manufacturer say of farm machinery —it is not the number of machines that wear out that makes me rich, but the number the farmers leave by the fence side, from season to season to be eaten by rust. A rusty tool is an expensive tool and it is a wonder to me that so many farmers who in a every other respect are as keen as "razors" allow rust to gather on their plough lays, cultivators, shovels, grain drills,

discs, harrows, and other implements and machinery when a small outlay of time or money, or both would avoid the loss both of time and quality of work, attendant on using rust covered implements. If the farm equipment is not properly housed during periods of disue, then it is all the more reason why it should be given a careful overhauling. This should be done when regular work is not pressing as on rainy days and during the winter season, then order whatever repairs are needed at once and put them on the machines needing them. If this is done there will be no "rush" repair orders to send in just when the ploughing, seeding, or harvesting season is on you. Pursue the repair work as a kind of recreation from the regular farm operations. It should be impressed upon every farm hand and hired help that a machine or vehicle kept in good repair and well oiled not only increases its efficiency but lessens the power required in using it. Then do not let machinery cry for oil. Oil is the cheapest machinery you can buy, therefore use it plentifully.

The proper maintenance of farm equipment not only saves money but avoids danger to those who operate them. Not infrequently do we hear of accidents resulting from careless makeshift for a bolt in a machine or for the want of a proper attachment to the harness.

In all cases prevention is better than cure and every precaution should be taken to secure the greatest efficiency of the machine. To attain this end every implement should be housed in a dry place. Where this is not practicable, all parts liable to rust should be removed and a thin coating of hard oil, well spread over the entire surface with a rag and placed in a dry place.

Test every machine during the slack season. Take the binder for instance. If you find the needle point is rusting and possibly dulled, rub with a fine file until a good point is secured and then polish off with fine emery cloth. Examine the binding apparatus in every part: see if any bolts, nuts, etc., are missing. See that the knife is sharp, the guards in line and the sections whole and well riveted. Inspect the rollers, make sure that they work freely and that the bearings are free from straw fibres. You may have to take the rollers out to remove this packing, but it will pay. Before beginning to take a machine apart a definite plan should be followed. Every part removed should be marked with a piece of chalk and a corresponding mark made on the place from which it was taken so that in assembling, the several parts should be replaced exactly in the positions they originally were. The taking apart of machinery should be avoided, except in cases where it is absolutely necessary to do so. The binder and mower and other machines of this class, are securely put together at the factory and if the parts are removed it is difficult to restore them to their proper adjustment.

An extra knife or sickle and pitman is a good investment. Some day when you are busy it will be needed and will pay big interest on the money invested if it is where you can lay hands on it at once. The same is true of other breakable, and often broken parts of implements and machinery such as shears, coulters, eveners, etc. In many cases an accident to one of the farm implements will cause the loss of not only a portion of the crop but also the time of men and teams so that the cost of the new piece is little compared to the loss from delay of men and teams while waiting for the new article to replace the one broken. Of course these breakdowns occur most frequently during the busy season when much valuable time may be lost in going to some distant smithy for repairs, and even then as is often the case, the man in charge is unfamiliar with or incompetent of turning out good

work, and the effected repair may prove but a source of trouble and annoyance.

Keep all tools clean and free from rust and all edge tools sharp. Have a convenient place for storage and see that all tools are kept there when not in use, and not left in nooks and crannies so that no one knows where to find them, thus saving much time in hunting up a missing tool. There should be a supply of machine oil, axle grease, castor oil, etc., for lubricating purposes.

The cheapest lubricant is a good quality of hard oil. For the wagon, binder, mower, for all places where it is possible to use it—it saves greatly in the cost of oiling. Rub it on the binder chains, smear it over the knives, use it instead of common oil or wagon grease on the binder trucks, wagons and wherever it is possible to use it. Frequent applications of dark red metallic paint, consisting either of red-lead or Venetian red and raw linseed oil, not only improves the appearance of many of the farm implements but adds greatly to their lasting qualities.

THE STORY OF A GRAIN OF WHEAT.

By T. G. Raynor, Seed Department, Ottawa.

A little grain of wheat said to a farmer one day, "I would like you to give me a chance to do my best this year so far as you are able to supply the conditions, and if you can do the same for my little brothers and sisters, I believe it will pay you. When I say little, I do not mean little in size as compared to other grains of wheat. As you see me I am a plump, well-developed specimen of my species, and I believe that if you would hand select some of the best heads that will grow out of me, and from other seeds, such as I am, then sow the seeds thus obtained next year on a breeding plot, and follow this practice up from year to year that you will both increase the average size of my race as well as increase the yield per acre. At any rate, I believe it will pay you well in selecting my brothers and sisters which are surrounded as you know by a good many shrunken, small and rather indifferent looking seeds, to put them all through a good fanning mill three or four times until you have made quite a complete separation. Then if you choose to do the very best by us, and yourself, you might hand pick us all over when you had time, for some of us might not be just up to the mark of highest production. Perhaps you could save some time, and labor by taking us all over to Mr. Jones' power-mill, where he has a lot of good screens in his mill, and he can give us plenty of wind. Once putting us through the mill might be quite sufficient."

"Very well," said the farmer. "I believe you know your business, and I will do as you say. What next would you suggest?"

"When you put us away in the soil next spring, you know we are pretty hardy, and that we like to get a good early start in a nice fine seed-bed, about as solid as you can make it under us 2½ inches down, but we do like the surface soil very finely divided, and all the more so if you intend that we are to associate with clover and timothy. If you can associate then with our cousin, barley. I believe it will be better for them, and you; but we will have no kick if you see fit to mix us up with them, only if you want us all to do our best you had better provide liberally for all our wants in

food and drink, as far as you can. If our bed prove to be dry enough when you put us in, and we don't want to be crowded too closely, Oh! about 60 lbs. of us to the acre will do very well. Sometimes you might put in another 15 or 30 lbs., of us, if we are good and big, and you would rather we wouldn't tiller out so much. You might roll us as we will start to grow more quickly, but if the bed be too moist, you had better wait until you see us up three or four inches before you level the soil around us.

"You would be greatly interested in seeing how we start life, I am sure. You see I have a re-production of myself in what they call the germ, and we start our root system first, before we do much with the part that is to strike upwards, which they call the plumule. This helps us to get hold of the soil quicker, so we can lay hold of some of the food you have supplied us with at an early date. I have heard you say that if the weather were cold and backward, that you were quite sure that we were rooting well anyway, and here is where you have shown your wisdom in selecting us all of good size. In the early life of what comes out of me, I have more of the ready made food which the young plant can draw on, than has the plant from a weaker brother.

"When the season is not favorable for rapid growth, you will usually observe that we stand it far better than our weaker friends."

"You spoke about a food-supply," said the farmer. "Now what do you want in that line? You have told me so much about yourself, I would like to give you a good bill of fare."

"I want plenty of Nitrogen to give me a strong, healthy growth, and potash, and phosphoric acid to develop the seed. Providence usually supplies me with a liberal supply of the other kinds of foods necessary for development. You know I get a lot of my food out of the atmosphere. If you put my skin under a good magnifying glass, you will see some little openings here and there. I breathe through these openings,—which they call stomata,—and I get carbon-dioxide too, of which I need considerable quantities. My! I do love plenty of sunshine, especially after a nice drink I have had from the clouds. I know, of course, that you cannot furnish me with these, but haven't you almost seen me grow under those conditions? Of course, you know it wouldn't do to develop too fast for we would be so sappy, and weak that the wind or heavy rainstorm would lay us down flat, after which we would not be of much use perhaps. So we enjoy the clouds too, when we make slower but substantial growth, and stiffen up our stems so we stand a few hard whacks now and again. If you notice too, we do not become such an easy prey to rust or smut, when we grow slowly, but surely.

"Sometimes you know we do not get much to drink from the clouds. It is then that we have to depend upon you to arrange things, so that we will not suffer from the drink we need to dissolve our food, and help to digest it in our system. You know we get a lot of our drink from the capillary water in the soil below us, and you will see the philosophy, now, of giving us a good, fine seed bed as the capillary water which draws up easily in the fine soil below us is prevented from getting away from us by the nice dust blanket you have provided us with.

"Perhaps you have noticed how we increase in numbers, if we are allowed sufficient space to develop. This process they call tillering or stooling, and it enables us to grow thirty, sixty and sometimes a hundred-fold. After we have grown a few weeks, you have noticed how from our centre we send up a sheath-like growth, which it is interesting to watch. That is to become our head, and we are made up of a number of spikelets each having three

or four flowers, two or three of which become self-fertilized, and produce seed, like myself. Sometimes you will find four seeds like myself in one of the spikelets, which is a good sign of a large yield, provided, we form large heads at the same time.

"As the season advances you notice that what is green turns brown and golden; this is the condition in which I become matured or ripe. It is in this condition also that I am used for feed for stock or ground into flour to make bread for man, or rolled out flat for breakfast foods, or perhaps I am laid away to reproduce my kind again, when they call me seed.

"Now, Mr. Farmer, what I have said about myself, is what takes place in the life history of my cousins, such as barley, oats, peas, corn, rye, buckwheat, etc.

"As a parting word, all I have to say is, if you wish us to do well by you, you must do well by us, which is only another application of the Golden Rule, which it pays to practice with your neighbors."

THE RELATION OF BACTERIA TO AGRICULTURE.

By C. F. Bailey, B.S.A., Toronto.

The relation of Bacteriology to Agriculture has been for some time generally recognized, but its true position, as an agricultural factor, has not yet been defined, and its importance, except with a few has been by no means fully realized. This indeed, is not to be wondered at; Bacteriology as yet is in its infancy; it was not until the middle of the 19th Century that the existence of these minute organisms (bacteria) was realized by the scientific world, and, for a long period after their discovery, they were studied almost entirely from the standpoint of their agency in producing human diseases. Therefore it comes about, that the disease producing bacteria have been more carefully studied than the other kinds, although these small workers play an important part in every phase of earthly life. We have been taught to look generally upon bacteria as destructive creatures, floating about in the air, in water and in every kind of undesirable place, seeking whom they may devour. Wheras, while it is a fact that many bacteria are harmful, producing diseases of man, cattle and plants, it is also true that there are fully as many which are actually beneficial, without whose agency, indeed, the changes in nature could not take place and without whose help the farmers occupation would be gone. It is my object to emphasize by brief mention, the many parts played by bacteria: the vital importance of these organisms to the science of agriculture. I shall make no attempt to describe, technically, the various actions, but a simple enumeration of the many departments of farming in which bacteria are active, will be of interest and will serve to give a glimpse of the end to which bacteriologists are working. For some time past the farmer has realized the important part played by insects, he has even learned to separate with a fair degree of accuracy, useful from injurious kinds; he sprays his orchard at certain seasons of the year, in order to kill the pests; on the other hand he refrains from spraying when the blossoms are out in order to avoid killing the useful insects, such as bees which carry pollen from flower to flower and these bring about fertilization. If the farmer then has found a little knowledge of entomology advantageous, how much more benefit would occur to him, from even a

slight acquaintance with bacterial action—upon which so many of his operations are dependent? Let us see what these operations are.

Any one who has lived on a farm, knows the value of well rotted manure as compared with, green manure, for fertilization purposes. The manure must be kept until decay has set in, before it will be of any benefit to plants. The process of decay, by which the plant food in the manure is reduced to a form in which the plants use it, is brought about principally by bacteria. Indeed, there exists so-called nitrifying bacteria, whose sole function seems to be that of converting the complicated substances in the manure to a simpler one for the use of plants. The bacteria work in the soil and in the manure pile, splitting up the vegetable matter contained there and placing it at the service of the crop. All rich soils contain millions of bacteria, in fact their presence is an indispensable factor in the cultivation of any crop.

Again, bacteria plays a most active part in the dairy industry, in such action as the ripening of cream and cheese, the souring of milk, the production of special flavors, or the occurence of bad ones; they are the prime movers.

What a splendid field for profitable investigation is open to the scientist in any one of these branches, for instance in the production of special flavors in cheese by bacteria molds; a very small phase of a very large subject. The proper ripening of cream depends upon the predominance of so called lactic acid bacteria, which grow in such abundance as to crowd out other kinds. If they prove too strong, however, the cream does not acquire the pleasant sour taste so familiar to the butter maker.

It can readily be seen, that in dairying, the "microbe" acts both as a friend and a foe and it is the task of the farmer and scientist to assist him in the former capacity and oppose him in the latter. It is their relation to dairying more than to any other branch of agriculture that bacteria have been studied, and the great progress made in this industry of recent years can be put down to that fact—Cleaner buildings, cleaner utensils, the use of starters, pasturization. These factors have resulted in the production of a better article, of more uniform quality, and have raised the dairy industry to a high place in farming operations. The actions I have mentioned may be described as fermentative, the changes in manure are also instances of fermentation, as are those of milk, the making of vinegar and other processes on the farm, are also brought about by bacteria.

So far, the organisms mentioned have been those in which the starchy material in plants is converted into sugars and the further products of inversion. Now we come to an interesting phase of bacterial life in which the action is somewhat different—I refer, to the so-called legume bacteria. Certain kinds of plants, notably peas, beans, clover, and vetches, form nodules in their roots and these nodules have been found to contain bacteria. Everyone is familiar with the appearance of these deformities (for they are nothing less) particularly upon the roots of clover—indeed their occurance has been known and commented on for many years, but it is comparatively recently, that their association with bacteria has been discovered. These microbes have the peculiar power of absorbing from the air the element nitrogen—a very necessary component of plant food—thus they not only improve the growth of the plant, but prepare the soil for another crop. Instead of exhausting the soil of its supply of plant food, as is the case of ordinary crops, these legumes leave the soil richer than they found it, drawing the nitrogen from the air and fixing it in the soil by means of bacteria living in their roots. The growing of clover has proved an enormous benefit to the farmer who can thus recognize in these small legume bacteria a powerful friend and ally. The organism is now grown in artificial prepar-

ations on a commercial scale, and sold to the public for the purpose of innoculating seed. The value of such commercial cultures is not a constant quantity, a great deal depending on the length of time the culture is kept before using. It is safe to say, however, that culture sent out by Experimental Stations which look to the interest of the farmer first, are better than those put on the market by commercial houses, which are selling for a profit.

I have mentioned some of the ways in which bacteria are useful to the farmer, let us now carefully consider injurious bacteria—those causing disease in cattle and plants. This subject of diseases of cattle is such a large one that will suffice here to give merely the names of those diseases without discussing any particular one. The most important are—tuberculosis, blackleg, anthrax, lumpy-jaw, glanders, tetanus, abortion, hog cholera, milk-fever, garget, hoof-rot, etc. It will be seen that there are very few diseases in cattle which are not caused by bacteria. Similarly many diseases which affect poultry are bacteriol in origin, as is also foul brood in bees. For some of these diseases, Bacteriologists have discovered remedies or methods of prevention. For others they have devised methods of recognizing the disease and checking it in the early stages, thus preventing its spread, and it is not improbable that the stockman may at some future period produce a breed of cattle immure to disease, or, at any rate, so far controlling the well known diseases as to make the spread of a serious epidemic practically impossible.

Though the subject of plant diseases is one of the newest phases of the science, yet several important plant diseases have been discovered of which the following should be mentioned, "Fire blight" of the pear, "Black Rot" of cabbage, cucumber wilt, soft rot of potato and tomato, also diseases of the bean, sugar beet, sorghum, and other farm crops.

Enough has been said to emphasize the importance of the microbe. We have shown him as a friend taking an active part in the preparation of the soil and manure, assisting in the growth of the plant and the enriching of the soil; aiding in the manufacture of butter and cheese—As a foe, attacking the cattle in various ways, causing diseases in plants and setting up decay. From the preparation of the soil to the storing of the final product he is there making his influence felt, in one way or another, and though he was not discovered much over fifty years ago, yet, he is as old as the bug and probably older. Even with our limited knowledge of the science we can realize the importance of bacteriology in agriculture. The discovery has explained many things which before were a mystery and has assisted us to assign definite causes to many previously obscure processes. Surely the intelligent farmer should be familiar with the principles of this science and should be able to take an interest in the work which is being done in Agricultural Bacteriology. It behoves him to make use of the Bacteriological Departments which have been established for his benefit. For instance, should he desire to grow alfalfa, he should apply to the Agriculture College of his Province for the proper culture with which to innoculate his seed, and for full information as to when and how to employ this culture; likewise any disease with which he is not familiar should be sent to the Bacteriologist for advice regarding diagnosis, treatment or prevention. The same Department can enable him in many cases to locate and remove the causes of impure water supply, etc. These are but a few of the ways in which the bacteriologist can assist the farmer. That he is ready and willing to do so goes without saying. It only remains for the farmer to meet him half way and to ask for the assistance which will so readily be given.

A FEW PHASES OF ECONOMICAL IMPORTANCE IN THE FRUIT INDUSTRY OF CANADA.

By A. G. Turney, B.S.A., Guelph.

To write an exhaustive and comphrehensive treatise on all the factors of economical importance in "The Fruit Industry of Ontario" would necessitate a considerable amount of time, work, ink and paper, and consequently in the following pages I have but touched briefly on some of the factors which appear of the greatest importance in an economical consideration of the industry in Ontario.

Perhaps there is no other industry in the Province in which it is harder to collect accurate statistics than in the fruit industry. The few figures and estimates found in this report are based on the Dominion Census returns for 1901, and too much reliability should not be placed on their accuracy as that year, i.e. 1901, was not a good one in the Fruit Industry, especially so in the case of apples.

Educational Influences.

It has been stated that the first fruit trees in this Province were planted some 150 years ago. At that time the settlers had at their disposal practically no information concerning the cultivation and production of fruits. Such knowledge, beneficial or otherwise, that they might have had was obtained from their own experience and from that of their neighbors. The fleeting years have, however, brought in their wake many decided improvements and advantages in this respect. The educational factors which are now rendering such great assistance to the Fruit Growers of this Province are indeed many and varied but space will not permit us to deal with the history of their evolution. Suffice it to mention briefly in order of economical importance the factors that have arisen.

The first decided factor in spreading information was the establishment throughout the Province of railways, thus enabling men to more easily travel to other parts of the Province, and thus to observe methods differing from their own.

The second factor was the founding in 1859 of the Ontario Fruit Growers' Association, the objects of this Association being to advance the science and art of horticulture in all its branches by such methods as they deemed advisable.

The third great factor was the publication on this continent, first of papers devoted to agriculture and its branches, and at a later date, of papers devoted exclusively to horticulture.

The fourth factor was the establishment in 1894 of a number of Fruit Experiment Stations throughout the Province. Their object was to tell and ascertain by experience, the variety of fruits best adapted to planting and cultivating in their particular locality, and to impart the result of their work to the farmers and Fruit Growers of the district.

In comparatively recent times the educational propoganda which the Dominion and Provincial Departments of Agriculture started into growth, has widened and developed into an extensive and admirably directed system for the accumulation and dissemination of facts and knowledge of economical importance to those engaged in the various phases of Agriculture. The four factors above mentioned together with Farmers' Institutes, Agricultural Colleges and numerous other Associations are now collectively engaged in raising the standard of the fruit industry as a factor of economical importance in the prosperity and progress of the Province.

Growth of the Fruit Industry.

In 1851, of all the land under cultivation in Ontario, an average of $1\frac{1}{2}$ per cent was in orchard and garden. In 1861, this amount had not increased. In 1871 it had swelled to $2\frac{1}{3}$ per cent, and in 1891 to $2\frac{3}{4}$ per cent. In 1901 to $3\frac{1}{4}$ per cent. These figures show a decided increase in the land under fruit, especially if it is borne in mind that the total land under cultivation has by no means remained constant, and that in spite of the increasing per cent of all land under cultivation, that under fruit has steadily increased. In 1901 of the $3\frac{1}{4}$ per cent stated as being in orchard and garden, some 3 per cent or 279,571 acres were in fruit alone. According to the 1904 report of the Bureau of Industries, since the census of 1901, orchards, gardens and vine-yards in Ontario have increased at the rate of 2 per cent per annum. Therefore, allowing this 2 per cent increase for the six years from 1901 to 1907 gives us now a total of about 320,000 acres under fruit in this Province. Again, allowing a 2 per cent. increase, there are to-day planted on those 320,000 acres some 15,094,000 trees compared to the 14,087,936 trees planted on the 297,571 acres in 1901, an increase of 1,006,281 trees and 40,429 acres.

In 1901 the capital value of the number of acres and trees quoted was estimated at $50,347,150 and the capital earning at $33,564,766, while the year's product was valued at $6,004,509. Again using the 2 per cent increase per annum (considered by authorities to be a moderate estimate,) we find that the acres and trees quoted for 1907 have a capital value of $57,395,751, and a capital earning of $38,263,833, and the value of the year's products at $6,845,137. Thus for the six years, 1901-1907, we have an increase in capital value of $7,048,601, in capital earning of $4,699,067, and in the value of the annual product of $840,630. These figures indicate a decided growth in the fruit industry of the Province.

Present Day Problems.

To-day there are many problems facing the Fruit Growers of Ontario, and some of them must be successfully solved in the immediate future if the Fruit Industry is to remain profitable in Ontario. The following question occurred to me:—What are the three most serious problems to-day facing the Ontario Fruit Grower? With the aim of obtaining the right to answer that question, I wrote to several prominent men engaged in the industry. To the letters sent out I received six answers, the following gentlemen, Messrs. E. D. Smith, Wm. F. W. Fisher, A. McNeill, Robt. Thompson, A. W. Peart, and J. W. Brennan, being so kind as to give me their views on the question. A summary of the answers gives the following problems.

(1) Control of Insect and Fungus pests, embracing the proper treatment and care of orchards.
(2) Transportation facilities and charges.
(3) Proper grading, packing and marketing of fruits.
(4) The labor question.
(5) The thinning of fruits.

Problem of Proper care and Treatment of Orchards.

Undoubtedly the greatest of these problems is that connected with the production of good fruits. This problem is perhaps more easily solved than that of transportation as the means for so doing are directly in their own hands, which is hardly the case when we come to consider transportation. It is now coming to be generally recognized that the Fruit Growers of

Ontario must spray their orchards, and adopt suitable methods of culture, or else get right out of the business. In this Province that day has passed when good fruits of all kinds could profitably be grown without spraying. Some of our growers have not yet recognized the truth and bearing of this statement, but they are, I trust, greatly in the minority, and must soon realize their mistake. As to the all-round beneficial influence which scientific spraying and up-to-date cultural methods have upon our fruit industry, there is not the slightest vestage of a doubt. It has been proved most conclusively. The increasing number of insect and fungus pests attacking our fruits together with the increasing competition from the United States and British Columbia render it an absolute essential of profitable fruit growing in Ontario, that nothing but the very best and most approved methods of caring for our orchards be adopted. There are degrees in spraying as in many things, and from what I have seen in the Niagara district, the bulk of our growers have not yet realized that spraying to e effective and to give the est results requires good materials, favorable weather conditions, care, patience and intelligence. In too many cases the object in view appears to be that of going over the orchard with a minimum expenditure of labor, time and money, *regardless of the thoroughness of the work done.* Neither are the cultured methods adopted all that they might be, and in these two respects our growers must wake up, for to-day the first essential to profitable Fruit Growing is the production of good fruit at a reasonable cost, and without it all our efforts in other directions will be of no avail.

Transportation Problem.

The transportation problem is doubtless the second most serious problem for without adequate methods of transportation and reasonable charges for the same, the full value of the efficient grading and packing of fruits cannot be realized. In this connection there have arisen problems both in the local marketing of fruits, i. e., in Ontario and in the more far distant markets of Western Canada and Europe. Owing to the nature of our fruit it must be handled and shipped very carefully and expediently. This necessitates a dependance on the Express Companies, and these Companies being to all intents and purposes monopolists, have charged exorbitant rates and provided no efficient accomodation or service. With regard to our more distant markets, the situation is this. Given really good sound fruit, what then is essential? Clearly, the facilities for placing that fruit on the markets of Western Canada and Europe in as good a condition as when taken from the Grower's hands. To put the matter concisely, a complete system of cold storage, and a safe, regular, cheap and rapid means of transportation, extending from the Fruit Grower in Ontario to the consumer in the far distant markets.

A great deal has been done towards the attainment of this end, but much yet remains to be accomplished. Improvements in the kind, condition and number of cars and icing stations provided by the railways are needed, and more accurate information concerning the exact location of car-loads of fruit in transit should be supplied. Suitable sheltering accomodation for fruit at points where it is shipped by the car-load. Properly subsidized steamship lines with vessels of a good speed not less than 14 knots per hour, containing properly ventilated apartments suitable to the storage of fruit. A more efficient supervision of the storage and handling of fruit in loading and unloading it from the steamships, and the Government should have the power to withhold part of the subsidy should the steamship lines not fulfill their part of the contract to the satisfaction of the grower. The amount held back should go to recompense the loss sustained by the Fruit Growers.

In connection with the local markets, it is only recently that the Express Companies came under the jurisdiction of the Railway Commission. Previous to this move, any plea for improved service or more resonable rates was totally ignored, but now we may hope for improvement, although the outlook in this respect is certainly not bright. One thing is sure, no satisfactory re-adjustment of this trouble will result from spasmodic and sudden moves. Reasonable rates and a more adequated and efficient transportation service will only result from a carefully planned, and well carried out scheme embracing a combination of education, organization, and legislation. A proper use of these factors extending over a considerable period of time should obtain redress of the grievances of the Ontario Fruit Growers.

The Proper Packing, Grading, and Marketing of Fruits.

In these days of keen competition, it is the attention to detail which counts in the struggle for commercial supremacy and perhaps in no other industry is this more clearly shown than in the Fruit Industry. British Columbia Growers have ousted the Ontario Growers from the markets of Western Canada, and why? Not because their fruit is of better quality, for the climate and soil of our Province is favorable to the production of the highest quality of fruit, but because they have paid attention to detail in picking, packing, grading and marketing their fruits. Of this phase a few words may be said.

The judicial thinning of fruits belongs to this problem because if the grower by use of thinning makes sure that his trees do not bear any more fruit than the properties of the soil, and the climate will develop to the desired size and maturity then the labor of picking and grading will be largely decreased. Graders state that it is a pleasure to grade the produce of an orchard that has been judicially thinned. The quantity of undersized, unsightly and immature fruit is very appreciably lessened and the quantity of first class fruit, the fruit commanding the highest price, is materially increased. All this will help the grower to put a better and more uniform product on the market.

But the real solution of this problem undoubtedly lies in co-operation. The establishment of properly organized and controlled co-operative associations with central depots to which the growers may haul their fruit, there to be graded and packed in neat, durable and attractive package by thoroughly efficient labor will enchance the reputation of Ontario fruit and increase the trade, and profits of the growers. These Associations should also have control of the selling of the produce, and to do this to the best advantage would necessitate a proper system of cold storage warehouses so that the fruit might be held over to take advantage of a fluctation in prices. Such Associations have been established and are working fairly satisfactorily, and their extension and improvement should be strongly encouraged.

The Labor Problem.

The labor problem is one to which there does not appear to be any immediate or satisfactory solution. The labor necessitated in the operations of fruit-growing in Ontario endures only through some seven months of the year. The work which the fruit growers can offer for the other five months is but little. If there were work for the winter months to be obtained in the vicinity, then growers could expect their laborers to come back to them each season, and in this way they would be sure of trained help. But now,

when the season is over, the majority of the men who during the summer have been engaged in the fruit industry must go long distances to procure employment for the winter, consequently they do not return and thus the fruit growers are obliged in most cases to procure fresh and untrained hands every season.

It seems to me that for some years to come our fruit growers cannot expect any satisfactory solution of the labor problem, and their endeavors should be concentrated in an effort to make the very best of the material at their disposal, rather than to be constantly depreciating its value.

By-Products and Waste.

More attention must be paid to the surplus and by-products of the industry. The amount of fruit that goes to waste annually in this Province is almost inconceivable. We frequently get gluts on the market, and the question naturally arises—Are these gluts due to over-production? It is a recognized principle of economy that there can be no over-production of an article so long as there is a person in the world in need of that article. If this argument is followed out in respect to the fruit industry, it is found that there is no over-production, but that the waste and the gluts are due to a lack of proper distribution. Individual effort will not remedy this state of affairs. It will only be by thoroughly organized and extensive systems of co-operation that the millions of dollars that are annually going to waste in unused fruit in Ontario may be saved to the grower. We should aim to decrease the loss, not by covering the country with jam factories, evaporators, wine, cider and vinegar mills, but by lessening the bye-products and waste, through a better system of distribution, embracing improved methods of growing, improved transportation service, and improved methods of marketing.

I am well aware that in these few pages, but a few of the many problem facing the fruit grower of Ontario, have been dealt with, and these but briefly, and necessarily imperfectly, but I trust that they will convey to the reader a general idea of the nature of the most serious obstacles which the men engaged in the fruit industry of Ontario must solve in the immediate future.

THE DAIRY INDUSTRY IN ONTARIO. AS IT IS AND AS IT SHOULD BE IN THE FUTURE.

By C. A. Publow, M.D., Ithica, N.Y.

It is doubtful if any country in the world as new and young as the Province of Ontario can boast of such a progressive and remarkable dairy industry. The export trade in both cheese and butter has both astonished and satisfied the mother country not only in the quantity of these products manufactured but in their excellent quality as well.

And yet where can we point to any part of this great work that is absolutely perfect? Fortunately for Canadians they are willing and ready to receive advice and criticism in the proper spirit and to this fact we must credit a great deal of the success obtained by those persons connected with this well known and respected industry. Young men seek the benefits to

be derived from the experience of years and toil that have brought gray hairs to our noble ancestors and 'hen by applying these with the advantages of a scientific education and physical strength are accomplishing results that go far in cementing union, co-operation and success to any great national undertaking.

It is with admiration and pride that we and others point to the excellent system of dairy instruction and sanitary inspection in connection with cheesemaking and buttermaking, to the improvement in factory buildings and surroundings, to the work of Farmers' Institutes and Women's Institutes and above all to the great improvements made by the farmers themselves in an endeavor to improve or perfect the milk supply of the Province.

Still how many of these branches of the dairy industry are not capable of making further improvement? How many cheese factories are there in which a few careless patrons do not exist? How many farmers are there who could not make some simple improvements in the routine of producing or caring for milk and in making the quality of cheese better? How many cows still are compelled to live in unclean, unventilated stables, devoid of fresh air and sunlight and how much can be accomplished in improving the milk supply of our towns and cities? A review of some of the more important branches of this great industry as they now exist and some suggestions which appeal to the writer after some years of study, may be of some interest to those who are lending a helping hand in the making and securing of things as they ought to be. Let us start at the farm, the home, or source of dairying and take a look at special features or difficulties as they arise between the farm, the manufacturer or the consumer.

Ontario's Dairy Farm.

The Province of Ontario with its lakes, rivers, running streams and rolling land is naturally suited for dairying but nature alone will not provide everything. Our best dairy farmers do not depend upon pastures alone to feed the cow. They grow corn, peas, oats, alfalfa, clover hay, roots, etc., and build silos for storing foods that are both useful and necessary in the production of cheap milk. Good dairymen know the value of good feeding to milking cows, and the profits to be derived from growing their feed on their own farms. But there are many who do not yet realize this and buy manufactured feeds at high cost from the towns and cities and feed it at a loss to the cows. This is a very important point which more Canaian farmers should appreciate. High prices of dairy products will not make the farm pay if high prices must be paid for cow's feed. Grow your own feed, feed it intelligently to good cows and big profits are assured.

Ontario's Dairy Cows.

In the Province of Ontario there are some of the best dairy herds to be found anywhere. But there are also of as poor a class as ever existed anywhere. Few farms or herds are there in which some poor money losing, useless cow does not exist. In many instances we are surprised to see these on the farms of apparently intelligent and bright farmers.

The work of cow-testing associations is a grand one but far more can be accomplished by the individual farmer testing the merits of his own herd and weeding out for beef purposes all those that do not make sufficient profit to pay for their feed and care. The Babcock test, the scales, and the record sheets are all useful articles which no dairy farmer can afford to be without.

Dairy Stables and Milk-Houses.

How many cow stables are there in the Province of Ontario in which the cows are afforded as clean, sanitary and comfortable quarters as are those animals that roam wild in the undomesticated state? Has man been fair to the cow in return for all she has done for him?

The experience of the writer shows that nearly all cow stables are far from what they ought to be. In the average stable we find the roof unceiled, the air dusty, strong smelling of manure and full of bacteria which cause bad flavored milk, cheese and butter, windows are scarce or lacking, little or no ventilation exists and the blessed sunshine is barred out. There is no reason whatever why every farmer in Ontario should not rid his stable of all these undesirable conditions at very small cost. Ceilings can be ceiled to great advantage, windows and ventilators can be put in on rainy days and nothing is more useful than a good coating of whitewash for all woodwork inside. By all means give the cow a clean, healthy, comfortable home. She deserves it and will repay her owner with an increased flow of milk of a superior quality.

Care of Milk for Cheesemaking and Buttermaking.

In this work the farmers of Ontario have certainly made great strides in the past few years but it is undoubtedly still *the weakest link in dairy work*. There are mighty few factories that do not receive a considerable amount of grassy and tainted milk in hot weather and there really should be no excuse for it. There is not a farmer in Ontario who should have any difficulty in furnishing clean, sweet milk every day in the year if he only follows the directions which he can always secure free of charge from the Department of Agriculture and which have reached most farmers through Ontario's most excellent system of dairy instruction. Carlessness and indifference unfortunately make up the characters of a few patrons of almost every factory and the amount of inferior milk which they provide during the season does more to hold back the progress of the great dairy industry than any other one thing. Who is there who can not milk with clean hands in a clean atmosphere into a sanitary small top pail? Who is there who can not use a clean strainer and who cannot secure enough ice or cold water to cool and preserve milk in warm weather? Farmers, cheesemakers, dairy instructors all put your shoulders to the wheel, work for a cleaner and better milk supply and nothing will do more to improve the cheese and butter industry of the Province either in quality, quantity, or market value.

Cheese Factories and Creameries.

Ontario need not have any fear for her factory and creamery buildings. No country possesses any better places for manufacturing purposes. The sanitary conditions while not perfect by any means are gradually becoming so and are in much better state than the places in which milk is cared for at the farms. It is gratifying to see the curing rooms being fitted with facilities for controlling temperature. In New York State all cheese are cool cured in central curing rooms, but for Ontario the factory is the place to prepare cheese for the export market.

Pasteurization of Whey and Skimmed Milk.

The pasteurization of whey and skimmed milk as is being done in a few factories in Ontario is a practise which should appeal most favorably to all dairymen. This prevents the transmission of bacterial diseases, and also

adds to the economic value of the product. No one thing causes as much bad flavored or overripe milk as the whey-tank, resulting from improperly washed cans in which whey is returned to the patrons. Nothing will do more to prevent these troubles than will the pasteurization of whey and skimmed milk before it is returned to the patrons.

Manufacture of Whey-Butter.

The manufacture of whey-butter has suddenly and recently sprung into an active and prominent place in cheese factory work. Whether or not this business will be permanent remains to be seen and at the present it is a hard matter to predict its future. There is no questioning the fact that whey-butter of good quality can be made and in many places, profitably. In the process of cheesemaking a certain amount of milk-fat is unpreventably lost and the amount lost varies with the condition and richness of the milk

Strathallan Cheese and Butter Factory, at Hickson, Ont.

One of the largest in Canada. Made last year 232 tons. Curing-room at back, fitted with fan system to force air in circuit through factory and underground.

and the method of manufacture. If patrons persist in sending overripe milk then much fat goes out in the whey and of course more whey-butter can be made. The average cost of making this product varies from six to eight cents per pound according to the amount of fuel, labor and time required to do the work. The tendency for some makers is to handle the milk so roughly that much fat is taken from the cheese in order to increase the yield in butter. These men should be watched closely and if the fat content of the cheese goes below the legal standard they should be severely punished. The quality of Canadian export cheese cannot be allowed to suffer for anything of such minor importance as the whey-butter business.

If farmers care for the milk properly and makers do their work intelligently there will be better and more cheese and there will be no profits in whey-butter making.

Paying for Milk at Cheese Factories.

In this the dairymen of Ontario are making a mistake. The only correct way to pay for milk for either cheesemaking or buttermaking is by its fat content as shown by the Babcock method. All men making tests upon

which payment for milk is based should be thoroughly competent and under direction or license from the Department of Agriculture. The farmer should be protected and assured of correct, honest treatment and then he should demand that all milk be paid for on this basis.

Use of Commercial Starters.

Nothing has done more to improve the flavor of Canadian cheese than the intelligent use of these scientific cultures of lactic acid forming bacteria. Every maker in the Province should be perfectly familiar with the making and care of these valuable assistants and should never be without at least one in his possession.

Use of the Acidimeter and Wire Curd-Knife.

It is doubtful if any utensils were ever of more value in the art of cheese making. The value of any such apparatus as the acidimeter by which the

The Bright Cheese and Butter Factory, owned by B. C. & B. Mfg. Co., Ltd., Bright.

acid content of milk or whey in any of its forms can be determined to the delicacy of one-hundreth of one per cent. in about a minute is really tremendous for by its use the maker has an accurate knowledge of the condition of his product at all times during the manufacturing process and can govern the changes in an intelligent manner. No maker should be without both of these. He cannot afford to work witnout their assistance.

Cheese for Home Consumption.

Why is it that something is not being done to increase the home consumption of cheese in Canada? The total output of cheese in Ontario is not increasing to any appreciable extent. Neither is the price paid by exporters, although the local merchant or grocery keeper usually manages to get a good price for what he sells. While we can look forward to the probability that the prices of export cheese will not decrease much, with the competition for markets by other countries it is doubtful if they will ever be very much greater. One thing we are absolutely sure of is that the wholesale selling price of export cheese is not by any means increasing in the same proportions as the selling price of many other farm products and also to the cost

of the many other articles and agents that enter into the cost of producing and manufacturing this famous dairy product.

There is unquestionably a great opportunity for dairymen to increase the amount of cheese consumed in Canada. The population is ever rapidly increasing but the amount consumed by each individual should also be increased. The principal point in question then is, how may the home consumption of cheese be increased, and to this we may answer with the following suggestions:—

1. By improving the quality of all cheese offered for sale.
2. By putting the cheese up in clean, sanitary, attractive and convenient sizes and shapes.
3. By making more varieties of fancy cheese.
4. By properly advertising cheese offered for sale.

Make-room in the Strathallan cheese factory.

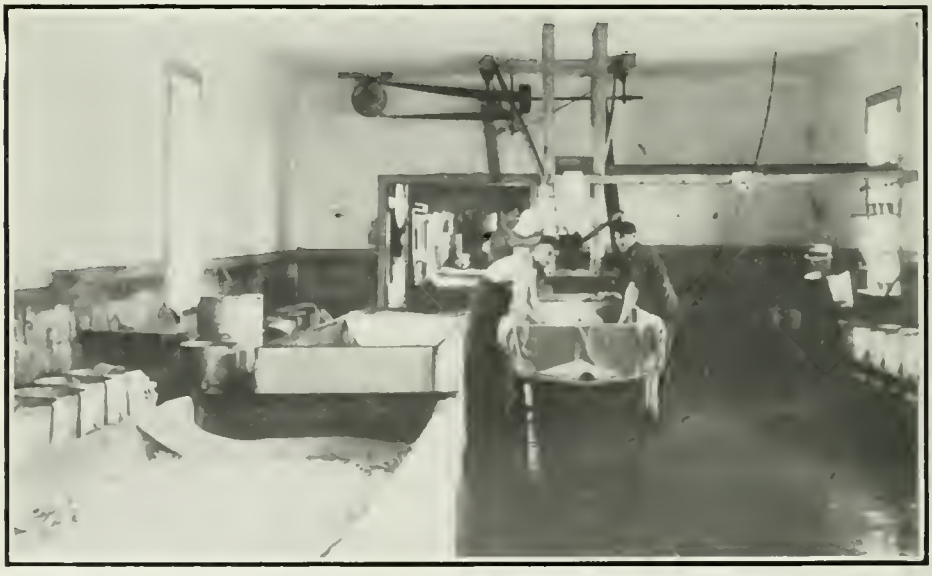
The question of improving the quality of cheese offered for sale in groceries and dairy stores is a very important one which is entirely under the control of all factorymen and dairymen if they will only use their influence and exert themselves a little in their own localities. Far too many green, unripened cheese are offered for sale in towns and cities and this practice is largely responsible for the comparatively small amount of cheese eaten in Canada. The Canadian export cheese is a delicious article when properly cured, but is an untempting and indigestible food when only a few weeks old.

Any one who has had the opportunity of visiting many cheese-factories in Ontario knows what happens when a vat of cheese proves unfit for shipment or export. The cheesemaker either cuts the cheese at home and distributes it among his patrons or tries to sell it to a local grocer Temporarily the factorymen and maker escape loss but it is only another step in decreasing the chances of future sales and in ruining the home consumption of cheese in our great country. We must admit that such acts in a measure protect our export trade but surely we at home should have as good food material as the Englishmen.

But if we are to increase the home consumption of Cheddar cheese we must make a special style of Cheddar cheese. Our regular export cheese are too firm, they cure slowly, require more milk for manufacture and do not bring as much money as a softer cheese. Nearly every factory in Ontario is asked to make a number of cheese for local grocerymen, farmers or people in towns and cities and instead of giving them the regular Cheddar, the maker should give them a softer, sweeter cheese. There is far more money in the manufacture of home-trade cheese than in export. At this time of writing, export cheese are selling for 11 9-16 cents per pound while the home-trades in New York State are selling wholesale for 14 3-4 cents per pound.

Cheese in Suitable Sizes and Shapes.

Another factor that has been sadly neglected in stimulating home consumption of cheese is that of putting the cheese up in suitable sizes and shapes, under sanitary and attractive conditions. In this respect cheese is far



In the making-room of the Bright factory, Bright, Ont.

behind almost all lines of food products which we see at every turn put up in such a manner that they attract the eye and stimulate the appetite of the consumer. In cutting a fifty pound cheese a groceryman figures on about four pounds waste and a cut cheese is not the neatest looking thing in the world. Why not make some cheese into small sizes for family use? The midget, weighing about two pounds, is a beautiful cheese for table use, the six to eight pound size makes an ideal size for the family while the one pound print in sanitary packages is most suitable for grocery trade and for the table.

Use of Paraffin on Home-Trade Cheese.

Why are the home-trade cheese in Ontario not paraffined? The process is inexpensive, simple and gives a beautiful appearance to cheese. The smaller cheese require no bandage or end cloths, they do not become covered with mold, do not become dry and have little or no rind formation.

In curing at a temperature of 65° Fah. in an ordinary cellar or curing room, an eighty pound cheese will lose 4.2 pounds of its water content in a period of six months. Just think what a loss this means and then remember that it can be almost entirely prevented by the use of paraffin, and at the same time the quality of the cheese is improved in every way. For minor, commercial reasons, Englishmen may object to paraffined cheese but for home use there is no reason why it should not be used.

Open Market for Fancy Cheese.

With the exception of a limited amount of the club variety, the question of fancy cheeses has received little or no attention from manufacturers in Ontario. Perhaps Canadians do not eat so many delicacies as Americans but one reason is that they do not have the opportunity. If we do not make

Elevated Whey Tank at the East Zorra and Blandford Cheese Factory, Innerkip, Ont.

Showing pipes for pasteurizing whey in tanks. The system of piping indicated here has been changed somewhat, adding greatly to the utility of the tank.

fancy cheeses the people cannot eat them. The trade in this line of goods in New York State has increased over 1000 per cent. in the past five years and is still increasing rapidly to the advantage of the farmer, the factorymen and even to the consumers.

There is a tremendous field in Ontario for fancy cheese and there is no branch in dairying that yields such large profits.

Advertising Dairy Products.

The problem of advertising cheese is one which may not interest the farmer directly but the factory owner will certainly be well rewarded by spending a little money in letting people know of the goods he has for sale. This is a comparatively new procedure in dairy work but is most commendable one and one in which is reaping good interest in several places in New York State.

Milk Supply of New York State.

It is doubtful if any branch of dairying in the Province of Ontario is more in need of reorganization and improvement than this very important milk supply of towns and cities. The sanitary conditions as they exist in the surroundings of milk from the time it leaves the cow until it reaches the consumer is a lamentable story. The large number of cases of infantile diarrhœa diseases and deaths due to unclean milk is really astonishing and we sometimes wonder why it is not larger. The facts are all the more regrettable when we know that nearly all troubles can be prevented by the use of a little common sense and care by all those who handle the milk. It is to be hoped that the recommendations of the Royal Milk Commission will have the desired effect. No man, woman, or child in the Province should object to any reasonable requests or laws requiring a better milk supply for towns and cities.

Rear View of Innerkip Factory.

Showing whey tank on the left and septic tank for treatment of sewage in lower right hand corner of picture. The septic tank is divided into five chambers. The sewage enters the first chamber and the more liquid portion runs through a hole to the second chamber, and so on until from the last of the four settling chambers the liquid is syphoned off from the bottom into an empty compartment whence a drain carries it away, distributing it underneath a field.

Truly the dairy industry is a great one and the part made up by the Province of Ontario is one of which we all feel proud. But it is not perfect and there are many, many means by which improvement can still be made. Let us all do what we can by lending our assistance in an endeavor to build up a bigger and better business in Canada's best Province.

ALFALFA.

The cultivation of Alfalfa presents many interesting features and holds out attractive possibilities to every intelligent farmer in Ontario. Unfortunately many of our farmers are deterred from making a trial of this wonderful crop because of the many unfavorable reports which have been circulated from time to time by those who have tried to grow Alfalfa

without success. We are told by one that it is of no use as a food for stock, by another that it is hard to grow on most soils, some even go so far as to say that once established in a soil it is impossible to get rid of it. The first and last of these statements we beg to contradict flatly, as they are entirely unfounded. In reply to the question of the difficulty of soil, reports from different growers show that it can be successfully grown on a great variety of soil as follows; sandy soil; heavy clay; clay loam, well drained; gravelly loam; high stiff clay and gravelly soils. Climatic conditions undoubtedly have a large influence over the success of these soils and generally speaking Alfalfa is best adapted to a rich clay loam, free from excessive moisture in a good physical condition. With care and judgment in selecting seed and preparing a good seed bed, this valuable crop can be grown in almost any part of the Province.

Alfalfa—Third crop of the season, seed obtained from the "Panhandle," Texas.

A principal complaint regarding the soil in many localities is that it is too heavy and not sufficiently drained. Now the problem of drainage is difficult from more than one aspect, the chief one being expenses, but he who would be successful in farming transactions as in business, must count the gain as well as the cost, and when once a farmer realizes the undoubted value of this crop, when he considers the truly astonishing results which its successful cultivation has accomplished he will of a surety find ways and means to overcome this difficulty. As regards a heavy clay soil, the writer feels justified in saying that provided proper cultivation and drainage are given there will be no trouble in making Alfalfa one of the most profitable, if not the most profitable on the farm. In proof of this last statement Haldimand County furnishes a striking example. In this section the soil is an exceptionally stiff clay, yet the farmers of this county having drained and thoroughly cultivated their land, are now growing Alfalfa on a large scale. In one case a farmer had a field which had been down 26 years and is still producing large crops.

From the experience which many farmers have had in getting a good catch, the necessity of properly preparing the seed bed cannot be over emphasized. In preparing land for Alfalfa it should be thoroughly cultivated and immediately before the seed is sown, the land should be run over with a weeder, or with both a harrow and a weeder. If a nurse crop is to be used the seeder attachment should be placed in front of the tubes of the grain drill. The land should then be run over with a weeder for the purpose of levelling it. In this way the Alfalfa seed has the advantage of being located between the rows of grain and at a suitable depth in well prepared soil which has been worked in such a way as to give the seed the advantage of both fertility and the moisture of the soil. The use of nurse crops with Alfalfa has its advocates as well as those who denounce it. However, if such is sown it must be done very sparingly or the young Alfalfa plants are either smothered out, or when the nurse crop is harvested they die because of the exposure to the sun, or the young plants are crushed into the soil and die. Eighteen to twenty pounds of seed per acre is sufficient for ordinary purposes. When growing for seed production this amount may be decreased to 15 to 16 pounds. And when sown for pasturag the amount may be increased to 25 or even 30 pounds.

It is a well established fact that leguminus crops such as Alfalfa, clover, peas, beans and vetches thrive best when grown in a soil containing certain bacteria, or very low f rms of vegetable life. Each legume requires a certain species of bacteria for its best growth. These minute organisms gather the free nitrogen from the atmosphere, transfer it to the roots of the plant where it is built up into the form of nitrates, in which it is readily assimilated by the plant. These cultures are prepared at the Bacteriological Laboratory of the Ontario Agricultural College, Guelph. Directions as to their use and preparation for inoculations are furnished with the cultures, free of charge. Commercial fertilizers are frequently sown at the time of seeding, especially if there is an insufficient amount of barnyard manure at hand. Of the various fertilizers used alone the phosphates gave the best yield. Some potash and nitrogenous fertilizers may be used at the time of seeding. After the crop has become firmly established phosphatic and potash fertilizers are all that are required, the nitrogen being obtained from the atmosphere. An application of barnyard manure, about 12 loads per acre every four years, has proven very satisfactory.

The time of harvesting Alfalfa is very important. Cutting at too early a stage the crop does not contain the same nutritive value as at a later date. While if cut too late the plant is too woody and is less digestible, consequently it is better to cut a little earlier than too late. When about 1-10 of the crop is in bloom is an excellent time as at this time it possesses its greatest value. The cutting should be done in the forenoon when the dew is off, followed immediately with the hay tedder until late in the afternoon. This process is repeated the next day and the hay is then put into coils in the afternoon and left to cure for several days, the number depending upon the weather. When sufficiently cured in the coil, it is opened out for a short time and then stored in the barn. If the weather has been favorable the hay will be a bright green color and very palatable, which is very important factor for a stock food. Those who may be interested in this valuable crop we would advise writing to the Department for bulletin 165. This bulletin was published for the purpose of encouraging the growing of Alfalfa and all information necessary for making its cultivation a success. It gives the history of the plant, where first grown, when introduced into America, and also gives the result of numerous tests, as to time

of seeding, use of fertilizers, yield per acre, value of different varieties and many other important factors.

The various ways in which farmers become interested in Alfalfa culture are numerous. The more important ways being the Farmers' Institutes, the Agricultural Press and bulletins and frequently by recommendations from some neighboring farmer. It is extremly gratifying to know that in many localities it is on the increase and as its value becomes recognized the acreage devoted to this crop will increase. A slight draw back to its increase is the cost of seed in some localities. This fact should induce farmers to raise Alfalfa for seed as it always brings a good price.

Another difficulty encountered during the last few years has been, the tendency of the soil to dry out. This can be overcome by incorporating an ample supply of humus at the time of seeding. There is also a great tendency for blue grass and other common grasses to crowd out Alfalfa. Thus the necessity of demanding pure seed cannot be too strongly emphasized. In the majority of cases the difficulties have been due to a misunderstanding regarding the nature of the crop and its cultivation. As farmers become acquainted with Alfalfa this trouble will be largely obliterated. Pasturing and cutting too closely has also caused lots of trouble, the crop often dying after such treatment. In case of failure the cause should always be investigated and wherever possible removed.

A fact of considerable importance is that where sweet clover naturally grows wild Alfalfa will invariably grow equally as well.

Experience has proven that this crop is well adapted to all kinds of stock when fed. Its value being due to its large supply of protein.

Where winter killing is witnessed a good top should be allowed to grow to serve as a protection. A good catch can be secured by having the seed bed in the best of tilth.

When feeding the animals it is well to mix it with other clovers and grasses.

The following are extracts from the reports of some of the farmers growing Alfalfa.

Mr. John Pritchard, of Redgrave, reports: "Several farmers in my neighborhood grew it some years ago but without much success. The difficulty I fully believe was due to improper care and attention. By careful study I was very successful and the result is everything that could be desired."

"A neighbor has pastured his field severely and yet a lot of Alfalfa still remains in the field".

"This season our hay crop at its best was below the average, while our piece of Alfalfa was the heaviest crop of hay I ever saw. When cutting I chanced to pick up one of the stems that measured over 5 feet in length.

"Another neighbor sowed a nurse crop of barley and took off 45 bushel to the acre and his Alfalfa is now 16-18 inches high after taking off one crop (July 15) and a thick heavy stand is all over the field".

Mr. A. E. Mercer, Islington, reports as follows:—"My land is very hilly and until I tried Alfalfa nothing grew on the tops of these hills. Since sowing with Alfalfa they have been green all summer. Here the crown grows very close to the land and is not destroyed by pasturing".

"Last year it was the first to go into the loft and the last to be fed. Some remained there until the second year. After the red clover had been fed out I commenced feeding Alfalfa and my milch cows increased remarkably in their flow of milk".

This not only speaks well of its value as food for milk cows but also of its keeping quality.

The writer had an interesting interview with Mr. Jos. W. Andrews of Milton, who is the recognized pioneer of Alfalfa in that district. Mr. Andrews stated that he had first read of this crop in the Government reports. Being much impressed with the large yields per acre and the evident value of the hay for all kinds of stock, he visited the plots at the Agricultural College, Guelph, and there obtained more detailed information. The following season he sowed three acres of Alfalfa with barley at the rate of five pecks per acre as a nurse crop. The catch was perfect and the following season he had three crops, making in all about five tons of hay. The field is still in Alfalfa and bids fair to produce a very large yield this year. The soil on Mr. Andrews farm is a stiff clay but well incorporated with humus, which gives it a fair physical texture. In the main it is moderately well drained but one corner of the field where the Alfalfa is growing gives a fair indication to the effect of excessive moisture. The line between the two conditions is quite well marked. On the high ridge the Alfalfa is waist high, whereas on the lower portions of the field it has been completely crowded out by other grasses. Mr. Andrews informed the writer that he could not afford to grow the commer grasses on his farm and intended draining this portion during the coming season.

Mr. Andrews has also another three acres in Alfalfa adjoining the above mentioned field. It is not quite so good but bids fair to yield a profitable crop.

Last year he harvested the first crop (about three and one half tons per acre) for his own use. Sold the second crop for $101.00 and pastured hogs in the field during the remainder of the season. During the six years the first field has been growing Alfalfa he has manured once with barnyard manure—Once in four years he thinks is sufficient. He also finds that running a light harrow over the field in the Spring aids greatly in increasing the yield. On examination the writer found the soil completely filled with the nodules which are indications of the existance of bacteria.

It is gratifying to note that the majority of farmers in the vicinity are following Mr. Andrews example and with marked success. Mr. Alexander has quite a large field devoted to this crop. He did not use as much seed as is generally recommended (15-20 pound) and quite a large proportion of the hay will be composed of timothy—and other grasses. This will, no doubt, aid somewhat in harvesting but there is a danger of the alfalfa being killed out by the more hardy grasses. It is generally considered that Alfalfa seed looses its vitality much quicker than grasses or other clovers but Mr. Alexander informs us that the seed used on his field was four years old, a fact which seems to disprove this theory.

Mr. John Gardhouse of Highfield, has also been a successful grower of Alfalfa. This gentleman informs us that he was first impressed with the value of this crop while attenting the International Live Stock Show at Chicago several years ago. Several of the sheep breeders were feeding it to their sheep and lambs, and the condition of the latter warranted its value as a food for this class of stock at least. Since then he has been devoting quite a large area of his farm to this crop and would not be without it. He claims that when properly cured it is equal to wheat bran, in nutritive value, is relished by all kinds of stock and altogether gives excellent results.

He has no trouble in getting a catch, but is always careful in selecting land that is high and dry and in a fair state of fertility.

Harvesting.

Mr. Gardhouse cuts his Alfalfa when it is about one-fifth in bloom, but is governed a great deal by the weather. It has quite a large amount of moisture at this stage, but when left till later it is inclined to have too much fibre, and there is also more danger of losing the leaves, which are the most valuable part of the plant.

The cutting is done in the forenoon when the dew is off, followed immediately with the hay tedder until late in the afternoon. This process is repeated the next day and the hay is then put in coils in the afternoon and left for several days, the number of days depending upon the weather. When sufficiently cured in the coil, it may be opened out for a short time if it is found necessary, owing to the dampness of the ground and then stored in the barn. If the weather has been favorable the hay will be a bright green color, and very palatable which latter quality is a very important one for a stock-food.

In conclusion the Department wishes to congratulate those farmers who have begun to grow Alfalfa, and it is hoped that an even greater number will be tempted to test its merits next year. Our only advice is that those trying it in new sections give the matter careful study before sowing the seed and we are quite are that in the majority of cases the farmers will feel quit satisfied that they have something well worth the effort.

SOME OF OUR BEST FEEDS.

By R. W. Wade, B.S.A., O.A.C., Guelph, Ont.

When the price of grain becomes so high that the cost of producing meat or milk has reached its present limits, the feeder must carefully consider the comparative value of feeding stuffs and their cost of production. If he finds in the list of farm crops a few feeds that appear near the top as cheap producers of grain, then it is only good business to devote more acreage to those crops.

The feeds that stand out pre-eminently as being cheap to produce and most valuable for food are:—Roots, Silage, Alfalfa.

From the experience of old coutry as well as Ontario feeders we know that when roots form part of the ration, that animals feed better, keep in better health and make larger gains. It is a matter of observation in the college dairy herd that when the supply of roots give out it is hard to keep up the flow of milk. Boutsje, when she gave her highest monthly record was getting from 50 to 70 lbs. of mangles per day and we attribute her general good health when under high feeding to this ingredient in her ration. The value of roots in steer feeding was shown in the Spring of 1909 when a group of Seven Steers that were receiving a light meal ration of two lbs. per day, gained 1 1-3 lbs. per day each, but when the roots were withdrawn and one pound of meal added to the former meal ration they gained only 9-10 lb. per day.

Valuable as roots are, no ration is perfect without that most important and cheapest of all cheap feeds, Corn Silage. Roots may be more palatable, hay may contain a greater amount of nutriment pound for pound, but there is no feed grown on Ontario farms that acre for acre produces such an amount of palatable succulent food as does Corn Ensilage.

If it were not for one important constituent which it contains, Alfalfa could be disregarded even though its yield places it first among hay crops. The important constituent is "protein" without which in sufficient quantities, the store animal could not become fat nor the dairy animal yield a profit to her owner from her milk. Alfalfa is the greatest crop for the stockman, because it furnishes cheaply that constituent (protein), which enables him to cut down his meal bill.

Hooper of Arkansas fed Alfalfa (ground into meal) against wheat bran, and found the two to be of equal value in milk production. At the College this year feeding green alfalfa to young calves, they made on meal and their mother's milk an average gain for 60 days of 2 1-3 lbs. per day. After weaning, on meal and green alfalfa they made a gain of 1 5-6 lbs. per day, for 60 days. The meal ration before weaning was 1.06 lbs. per 100 lbs., body weight and after weaning it was 1.16.

While these three foods are so valuable, they may also be produced cheaply as can be seen from the following figures:—

The following figures give the actual cost of growing and harvesting roots and silage, and the cost of harvesting Alfalfa hay:—

1 acre produced 27 tons of mangles, cost $22.00.
1 acre produced 14 tons of corn, cost $20.00.
1 acre produced 2 tons of alfalfa, (first cutting) cost $2.50.
Valuing man and team at $3.00 per day.
Valuing man and one horse at $2.00 per day.
Valuing man at $1.50 per day.
Summing up the cost to farmer for actual work:—
The mangles cost 2½ cts. per bushel.
The corn cost $1.43 per ton.
The alfalfa cost $1.25 per ton.

THE DAIRY COW.

Address given by Mr. J. K. Livingston, at the Hepworth Farmers' Club, March 10th, 1909.

All improved breeds of animals are the result of man's genius. It is not the nature of any cow to produce a large quantity of milk and establish such records as we read of from time to time; her natural duty is to give sufficient milk to nourish her calf for a few months each year. Neither is it natural for the animals we designate as beef breeds to carry such an enormous amount of flesh: Nature intended the formation of flesh solely for warmth and protection of the body with no thought of the commercial value of fat and flesh. Years ago, perhaps thousands, all cattle were the same, just as we know the buffalo, the deer and the elk to-day. It was not until man undertook their domestication that the various breeds were formed and a system of evolution inaugurated, which has brought about the present variety and assortment of breeds. The dairy cow has been the result of feeding and selection for a definite purpose; so that, by selecting the best milkers and giving them proper feeding and care, it has been possible to bring to their present high state of development the different breeds of dairy cattle. However, while they are apparently fixed in type and characteristics there is always a tendency to revert to some remote ancestral trait: If the animals were left to themselves the good work of generations of progressive breeding would soon be lost sight of. There is no breed of

animals that will go on improving without constant assistance and the directing hand of man. As civilization has advanced and the population become more dense, the demand for milk and its products has increased, and the dairy cow by selection and feeding has been developed to meet this demand. Obeying that universal law that always moves along the line of least resistance, the dairy cow has taken on the form best adapted to enable her to produce a heavy flow of milk with the least expenditure of energy. Thus we have what is known as the dairy type, or dairy form, which we find in all dairy breeds of cattle, i.e., Jersey, Guernsey, Ayrshire and Holstein. The Shorthorn was at one time called a dairy breed or the dual purpose cow, but the show yard judges have shown such a preference to the breed as a beef animal that it is no longer known among the heavy milkers. The Wisconsin Experimental Station tried for several years, under Prof. Carlisle's instruction, to prove that the large dual purpose cows were the most profitable for the Wisconsin farmers. After calculating the value of food consumed and allowing market prices for the milk, it was shown conclusively that the dual purpose cow could not be strongly recommended. In the report of the Wisconsin Station for 1906 it is stated: "At the present time we find it practically impossible to secure cows of marked capacity for dairy production among the Shorthorn breed." Two cows stand in the same stable; both are fed the same ration, yet, one will extract from the food twice the amount of butter fat. This fact is seen very frequently in all herds. What is the inner quality whereby one cow can produce so much more than the other from the same amount of food? It is hard to find the right name for it, but it may be cal'ed "dairy quality." Now certain breeds of cattle are distinguished for this quality; they have the power to accomplish this work in proportion and perfection by reason of having been bred for that purpose from long lines of ancestors of like quality. Thousands of farmers will spend their time and money trying to make cows of beef breeding, do dairy work. Does it not seem reasonable that in a breed where dairy traits have been the sole object of the originators, whose work has been handed down or rather carried on for several centuries by generation after generation of successful breeders, that the tendency to produce animals of a profitable type is much more firmly fixed, and the power to transmit these qualities is greater in the pure-breeds than the animals that have been bred indifferently. It is just as easy for a man to serve two masters, as it is for a cow to please both the butcher and dairyman. The functions of meat and dairy production are opposite factors. The cow will either cleave to the one or yield to the other. The modern dairy cow is the marvel of the 20th Century. When cows are capable of producing nearly their own weight of butter annually it is certainly a wonderful performance, i.e. The Holstein cow Sara Jewel Hengeerveld 3rd, produced 30½ lbs. of butter in seven days, 121 1-3 lbs. 30 days: her mother produced a little over 100 lbs. of milk in one day and 685 lbs. in 7 days last summer. There is no reason why this record cannot be beaten. The whole history of the advanced dairy cow is a constant recurrence of records established and broken down. While we do not hope to see the average cow producing her weight in butter and this record taken as the standard of excellence for the farmers herd, yet we have convincing proof of what can be accomplished by a little care and an intelligent selection—and I hope to see the time when every farmer is keeping record of his cows and insisting upon a certain standard for every cow in his herd.

PREPARATION FOR SPRING.

By Lorne Davidson, Meadowvale.

To the farmer, Disraeli's saying, "The Secret of Success is for a man to be ready for his opportunity when it comes," is very apparent, especially at this season of the year. Within the month previous to seeding, the plan of campaign for the summer months should be thought out, so that when the opportunity comes he will be ready to meet it. A good definition of success is very hard to give, but probably the word production comes as near the desired term as any, and the farmer who produces the most beneficial and healthful products is the most successful.

Therefore, preparation for spring, is preparation for production, and the question should be how can we make the coming year of greater benefit than the last. Almost the first thing to do is to look over the implements, and see that they are in first class repair. Harrows sharp, cultivator points ready to bite, and other implements ready to give full service. The harness should be oiled, and bearing points of collars cleaned, and colts shoulders should be treated with salt water to toughen them; for a week or ten days before seeding.

When new implements are purchased, where possible and practicable, wider ones for three or four horses should be purchased, thereby gaining time, and saving labor. If the Chinese were to come to Ontario, they would support four or five people on every 100 acre farm, on the land the ordinary farmer wastes in unnecessary fences, and fence corners. Larger fields and straight fences for the future.

Seed grain should be cleaned early, preferably three times. Seed oats or barley well selected need not be changed for years, as large, plump seed will continue to give good yields for many years.

For those who need fall pasture for calves or young cattle, a small amount of Rape seed, 1 to 2 pounds per acre may be mixed in the drill hopper with other spring grains, and will make fine fall pasture for everything in the stock line, save dairy cows, if care is taken not to turn stock on while the frost is on the leaves.

For those who keep hogs or calves during the summer a small patch of Alfalfa will save many pounds of grain. If located near the buildings, it can be cut with a scythe, and will form one of the most nutritious green fodders that can be grown, and may be cut 3, 4 or sometimes 5 times in one season.

Probably the most important matter the farmer has to face in connection with seeding, either in spring or fall, is how to conserve the moisture in the soil. If spring plowing has to be done, it will pay well to unhitch the horses from the plow, and harrow the fresh plowed land twice per day, if the season promises to be dry. But if fall-plowed the surface should be broken with harrow or cultivator as soon as possible. The study of the capillary attraction of water in the soil is a most interesting one, and as soils differ, so must we vary the treatment. Speaking generally a loose soil well compacted with a loose mulch on top, is ideal. Top-dressing in winter will help spring conditions materially. By darkening the soil it draws the heat, and provides a surface mulch which helps retain moisture. Some object to spreading manure on snow on account of leaching in spring, but we should also remember that all soil is a filter, and when the liquid runs over the surface of the soil, every particle of soil that it touches, tends to retain all the valuable elements, and purify the water. Others object to

spreading unheated manure on fields on account of weed seeds, but experience will show this to be largely unfounded, for all winter and spring the birds will be found picking their living from amongst the litter and working in partnership with the farmer for the eradication of weeds. Every farmer should be a friend of the birds, and keep every young rascal with a 22 rifle or shot gun as far away from his premises as possible, even if drastic measures have to be adopted.

HOW THE TELEPHONE HELPS THE FARMER.

By J. W. Hall, Churchville.

(A paper read before the Churchville and Huttonsville Farmers' Club, March 15th, 1909.)

The farmer of to-day is one of the most progressive citizens of this progressive country. Whenever he is thoroughly convinced that a certain tool or piece of machinery will do his work better, do more of it, or increase his income; it is not very long before he owns that tool or machine

The first thought that comes to the farmer is: "What good is a telephone to me?" This is but a natural question. The farmer above all, is a practical man, and the value of the telephone has not yet been demonstrated. He cannot see the utility of it. It will not milk the cows, plow the soil, nor make the crops grow. What practical benefit then can a farmer derive from the telephone?

He can understand that it might be "just the thing" for the capitalist. He can see how merchants and city folk can use it, but the farmer cannot find time to fool around the house talking over a telephone. Some farmers argue that they have gotten along so far in life without a telephone, and why not the rest of their days?

This same argument, if carried out, would have kept hundreds of our improvements, now considered absolute necessities, off the farm, and would thus have retarded the marvellous march of progress that has made the modern farmer of Canada the model of the world. Because a man might walk from Quebec to Vancouver is no reason why it would not be cheaper and much more sensible to ride, as well as being quicker and easier.

Thousands of farmers, however, are quick to recognize the value of the telephone to the rural resident. They see the improved conditions that its adoption will bring to them and their families and the consequence is that the building of farm lines, which began some time ago, is going on at a livelier rate than ever before.

In spite of this fact, some farmers even yet are undecided as to the wisdom of this universal improvement. They fear that it is a needless waste of hard-earned money. But the farmer who has had a telephone for a year or more, knows why so many farm lines are being built. To him the reason is plain. It is because the telephone is a money-saving, time-saving, labor-saving addition to the farmer, that pays its own way.

The farm telephone has come to be recognized as a necessity. No one questions the statement that time is money, and very few will question the statement that as a time saver, the telephone has no equal. Time is an important factor on the farm.

"The great man goes ahead of time; the prudent man goes with it; and the blockhead endeavors to go against it." The farmer with the telephone is the great man of the time: he is the prudent man.

The need of telephonic connection is far more urgent to the farmer than to the city man. Every errand means a trip to town or to the neighbors, involving a loss of time at every step. Lost time means lost money, lost oportunity!

Suppose, in the rush of the busy season, when every hour is precious, a piece of important machinery breaks down. What is the result? To get repairs means a trip to town, lost time, perhaps a wasted crop. With a telephone at hand, the new part may be ordered in a moment, from a local agent. Then if not in stock, it can at once be ordered from the head company, often reducing the delay from a day to an hour.

The product of the average farm in Ontario is worth about $800, but the progressive, busy farmer, who uses the most improved implements and machines, produces 50 to 100 per cent. more than the average. There are only about 200 good working days in the year on the farm, therefore every day counts, when a cornfield is getting weedy, a day's work with the cultivator will make a difference of $25 in the value of the crop. When a field of wheat is ripe, a delay of a day may cost more. The successful farmer has to consider all these things, and he can not afford the time to run errands when nature is calling him to the field.

The farmer with a telephone not only saves time which he can devote to his fields, but, if he needs a man for a few days or weeks, the telephone gives him the "inside track" in finding some one. If he has fences to build or some other odd job that he cannot take the time to do, a moment on the telephone will find some one in a near-by village or town who will be glad to have a job. While it is getting harder and harder to find men who will work by the year on the farm, the telephone makes it easy to get help just when you need it without the loss of time, hunting for it. In a hundred other ways, the telephone saves time and helps to keep things going on the farm, thus swelling the profits for the year.

It saves the hard-working farm horses many a drive when they need rest. When stock gets sick, you can call a veterinary and often save the mose valuable animal on the farm, for usually that is the particular one that is stricken and liable to prove a great loss. When thrashers are in the neighborhood you can step to the telephone make all needed arangements for "change' of work, hire extra help, and order provisions, meat, etc., from town.

Perhaps the greatest service the telephone can render is in time of sickness. Medical attention can be summoned, more than half the time saved, and in many instances, a life saved. When accidents happen or fire breaks out, the telephone affords assistance that is of great value.

Before hauling your products to town, you may know just what your dealer is paying. You are in a position to buy when the prices are down and to sell when prices are up.

The telephone is the conecting link between city, town and country. It puts the farmer next door to everybody and everywhere. In a social sense alone, it is worth all it costs. News of the neighborhood flashes across the wire before it gets cold It helps to keep the boy and the girl contented at home. They are no lonjer isolated from the society of other young folk and farm life is not the drudgery of no-telephone times.

The advantages of a farm telephone are so numerous and valuable that one cannot measure or appreciate them at their real worth.

ANNUAL REPORT

OF THE

FARMERS' INSTITUTES

OF THE

PROVINCE OF ONTARIO

1908

PART II. MEETINGS AND STATISTICS

(PUBLISHED BY THE ONTARIO DEPARTMENT OF AGRICULTURE, TORONTO.)

PRINTED BY ORDER OF

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FARMERS' INSTITUTES OF ONTARIO

1908-9.

ANNOUNCEMENT OF SUPERINTENDENT.

In this volume we present statistics for the past Institute year—June, 1907, to June, 1908, also announcement of meetings to be held during the coming season, together with list of speakers and their subjects, and a condensed report of Farmers' Institute Convention held on September 8 and 9, 1908.

We direct the attention of Institute officers and directors to information for their special benefit as found on page 54.

We beg to express our appreciation of the assistance given by officers and directors in carrying on the work of the past year. We trust, however, that we may have even stronger support during the coming season. Each director has a responsibility in this work, especially so far as meetings in his immediate vicinity are concerned, and we cannot look to the farmers generally to support and take advantage of the work unless the directors who have been chosen by the farmers of the district to represent them exhibit a keen inter st in furthering the work of the Institute. The director not only has a responsibility in arranging for and announcing the local meeting, but we trust that he will see the possibilities in establishing local organizations—Farmers' Institute Clubs—for the purpose of holding regular Institute meetings throughout the year, and in this way provide an opportunity for studying local conditions and applying underlying principles and results of practical experience to local conditions.

This Department is preparing a booklet upon the formation of Farmers' Institute Clubs. A copy of the same will be sent to each director before the winter series of Institute meetings is held. We believe that we are doing the greatest service to the farmers when we point them to the means whereby they can effectively help themselves. There is no lack of literature sent out from the Department of Agriculture. Then again the agricultural press, the large weeklies, and even the majority of the local papers devote considerable attention to agricultural topics. It is not that the farmers need a greater quantity of literature but that a means be provided whereby they shall get a greater benefit from this literature and from an interchange of experiences and ideas on the part of the farmers in each locality.

We beg to draw the attention of our readers to the special meetings held during the past year and recorded in this volume. We believe that Institute work will gradually develop more and more along the line of special meetings for a special purpose. Whatever is done in agriculture, should be done thoroughly, and on a large scale; and it has been demonstrated time and again that in those districts where the farmers co-operate in the production of milk, the growing of high-class beef, the production of fruit or any other line, they usually as individuals, meet with greater success than those farmers who are working practically alone in isolated districts.

The success attending the special Fruit Institutes held last winter for the first time was most marked, and while we have given details in another portion of this volume, we beg here to draw special attention to that work.

We trust that each member of the Institute Executive especially the secretary, will realize the responsibility which rests upon him and put forth a special effort to make the coming series of meetings among the most successful in the history of Ontario Institutes.

Women's Institutes.

It is gratifying to be able to record not only an increased membership and attendance but also to quote the statements of officers and members who have been connected with the Institutes for the longest time, that they are more than ever impressed with the possibilities for assisting the individual and the community to a fuller and more complete life through the medium of the Institute. The effectiveness of the work is more marked as the years progress. We believe that the Women's Institutes of Ontario have done much to relieve the monotony of country life in some of the more sparsely settled districts, to improve the conditions surrounding home life in even the best of our rural districts, and to divert the attention of some of the city ladies along more elevating lines. Not only the mothers but the daughters who have not yet left the public schools are being enlisted in this good work. Each has a part which she can do both with benefit to herself and profit to the community in which she lives. We have organizations in 89 districts and branches established at 465 points. The membership last year was over 12,000 and the attendance at Women's Institute meetings throughout the year was 93,780. These figures speak for themselves. We appeal to the officers of the Farmers' Institute, especially in Eastern Ontario, to use their influence in establishing organizations for the women. We believe that nothing would tend to popularize and make more effective the work of the Farmers' Institute.

GEO. A. PUTNAM,
Superintendent.

KEY TO REGULAR AND SUPPLEMENTARY MEETINGS TO BE HELD BETWEEN NOVEMBER 20TH, 1908, AND MARCH 6TH, 1909.

Name.	Page.
Addington	20, 27
Amherst Is	20
Brant N	18, 25
Brant S	18, 24
Brockville	20, 28
Bruce C	17, 21
Bruce N	17, 22
Bruce W	17, 22
Bruce S	17, 22
Carleton	20, 28
Cornwall	20, 28
Dufferin	19, 26
Dundas	20, 28
Durham E	19, 27
Durham W	19, 27
Elgin E	18, 23
Elgin W	18, 23
Essex N	18, 23
Essex S	18, 23
Frontenac	20, 28
Frontenac C	20, 28
Glengarry	20, 28
Grenville S	20, 28
Grey C	21
Grey N	18
Grey S	17, 22
Haldimand	18, 24
Halton	17, 18
Hastings E	19, 20, 27
Hastings N	19, 27
Hastings W	20, 27
Huron E	17, 21
Huron S	17, 23
Huron W	17, 21
Kent E	18, 23
Kent W	18, 23
Lambton E	17, 22
Lambton W	17, 22
Lanark N	20, 28
Lanark S	20, 28
Leeds N. & Grenville	20, 28
Leeds S	20, 28
Lennox	20, 27
Lincoln	18, 24
Middlesex E	17, 22
Middlesex N	17, 22
Middlesex W	17, 23
Monck	18, 24
Muskoka S	20
Norfolk N	17, 24
Norfolk S	18, 24
Northumberland E	19, 27
Northumberland W	20, 27
Ontario N	19, 26
Ontario S	19
Oxford N	17, 23
Oxford S	17, 24
Parry Sound W	21
Port Carling	21
Peel	19, 26
Perth N	17, 22
Perth S	17, 23
Peterboro E	19, 27
Peterboro W	19, 27
Prescott	20, 28
Prince Edward	27
Renfrew N	20, 28
Renfrew S	20, 28
Russell	20, 28
Simcoe C	21
Simcoe E	22, 25
Simcoe S	18, 25
Simcoe W	21, 25
Stormont	20, 28
Union	17, 22
Victoria E	19, 27
Victoria W	19, 26
Waterloo N	18, 25
Waterloo S	25
Welland	18, 24
Wellington C	19, 25
Wellington E	18, 26
Wellington S	18
Wellington W	18, 25
Wentworth N	18, 25
Wentworth S	18, 24
York E	19, 26
York N	19, 26
York W	19, 26

REPORTS OF LOCAL FARMERS' INSTITUTES

Institute District.	Membership for year ending December, 1907.	Membership for six months ending June, 1908.	No. of Meetings held.	Total attendance.	No. of papers read or addresses delivered.	Receipts.			
						Cash on hand per last report.	Members' fees.	Grants.	Receipts from conventions and excursions.
						$ c.	$ c.	$ c.	$ c.
1. Addington	73	77	5	438	18	30 89	18 25	50 00	.....
2. Algoma, Centre	102	79	25	703	58	111 21	19 25	50 00	.....
3. Algoma, East	155	58	5	138	15	39 12	7 75	25 00	50 00
4. Algoma, North Shore	106	67	17	686	47	38 29	29 25	44 00	3 75
5. Amherst Island	84	46	3	218	5	13 16	12 75	50 00	.....
6. Brant, North	245	255	10	965	35	144 33	47 60	50 00	83 47
7. Brant, South	353	396	8	865	41	17 21	98 50	50 00	197 55
8. Brockville	88	102	6	533	18	19 20	26 25	25 00	.....
9. Bruce, Centre	104	132	7	1,357	21	259 80	25 50	75 00	58 83
10. Bruce, North	150	135	6	336	16	117 59	19 45	75 00	41 00
11. Bruce, South	206	230	7	2,351	38	167 89	43 00	50 00	42 37
12. Bruce, West	321	293	3	1,055	7	174 61	73 00	50 00	68 05
13. Carleton	173	242	7	663	22	50 44	46 75	50 00	.....
14. Dufferin	389	350	17	1,260	69	109 49	91 50	50 00	40 96
15. Dundas	264	201	6	1,158	26	183 13	51 00	50 00	.....
16. Durham, East	222	216	11	580	32	139 18	53 75	50 00	51 50
17. Durham, West	181	140	8	376	18	264 81	33 50	50 00	85 00
18. Elgin, East	261	287	6	518	18	152 71	68 25	50 00	.....
19. Elgin, West	141	161	7	785	31	29 71	39 25	50 00	.....
20. Essex, North	136	146	11	832	37	63 60	34 75	50 00	.....
21. Essex, South	181	215	7	1,085	41	41 02	51 50	50 00	.....
22. Frontenac	87	16	3	240	8	44 34	6 75	50 00	.....
23. Frontenac, Centre	78	107	5	450	17	39 16	18 95	50 00	.....
24. Glengarry	325	243	5	825	23	23 11	53 25	50 00	.....
25. Grenville, South	140	161	11	772	29	17 81	35 75	50 00	.....
26. Grey, Centre	303	248	13	1,496	52	34 03	62 00	50 00	83 45
27. Grey, North	279	289	11	1,199	34	123 84	69 75	50 00	43 81
28. Grey, South	233	226	7	1,460	26	.....	60 75	50 00	162 55
29. Haldimand	356	350	13	2,170	55	367 64	83 50	25 00	177 80
30. Halton	557	643	12	2,223	57	131 82	160 50	50 00	205 00
31. Hastings, East	151	96	7	879	26	52 68	28 50	50 00	.....
32. Hastings, North	246	259	20	1,401	52	40	45 50	50 00	.....
33. Hastings, West	64	152	7	890	30	80 96	38 25	50 00	.....
34. Huron, East	350	325	12	1,849	49	238 59	78 25	50 00	9 80
35. Huron, South	225	185	10	1,945	40	189 66	45 00	25 00	39 05
36. Huron, West	191	173	9	1,230	37	50 02	39 00	75 00	72 07
37. Kent, East	175	219	9	1,045	56	2 06	49 65	50 00	.....
38. Kent, West	176	201	7	731	32	8 68	49 50	50 00	.....
39. Lambton, East	180	165	9	900	23	200 17	32 75	50 00	.....
40. Lambton, West	300	234	10	611	45	139 35	64 25	25 00	48 89
41. Lanark, North	122	66	7	651	27	5 45	23 50	50 00	.....
42. Lanark, South	81	121	8	1,140	43	.....	30 50	50 00	.....
43. Leeds, N., and Grenville	82	155	8	1,057	30	.....	37 50	50 00	.....
44. Leeds, South	173	141	6	2,422	30	21 35	35 75	50 00	.....
45. Lennox	125	137	6	250	21	11 13	34 25	50 00	.....
46. Lincoln	217	222	9	2,660	39	168 00	51 50	55 00	33 85
47. Manitoulin, East	74	.....	7	709	21	.....	.....	.....	.....
48. Manitoulin, West	74	.....	6	778	18	.....	.....	.....	.....
49. Middlesex, East	221	276	11	1,522	40	173 21	69 00	50 00	96 00
50. Middlesex, North	307	256	9	1,474	39	183 51	69 00	50 00	87 50
51. Middlesex, West	142	145	7	760	24	105 01	39 25	50 00	.....
52. Monck	149	159	7	574	24	.....	39 00	55 00	.....
53. Muskoka, Centre	170	64	5	310	16	1 46	15 75	25 00	40
54. Muskoka, North	86	90	9	419	19	.....	39 50	25 00	.....

FOR YEAR ENDING, JUNE 30, 1908.

Receipts.—*Con.*			Expenditure.										
Miscellaneous.	Balance due Treasurer.	Total receipts.	Due Treasurer per last report.	Expense for meetings.	Officers' and Secretary's salaries and expenses.	Postage and Stationary.	Printing and advertising.	Lecturers' expenses and wages.	Periodicals for members.	Miscellaneous.	Total expenditure.	Balance on hand.	No.
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
.....	.....	.99 14	.....	27 75	20 00	9 47	13 50	9 00	.....	5 00	84 72	14 42	1
50 00	.....	230 46	.....	3 50	16 00	2 25	4 50	15 00	.....	34 00	75 25	155 21	2
.....	.....	121 87	.....	53 00	27 25	1 92	4 00	12 00	.....	1 00	99 17	22 70	3
.....	.....	115 29	.....	19 00	17 25	3 62	5 90	.....	.....	11 00	56 77	58 52	4
.....	.....	75 91	.....	5 75	10 00	4 50	.....	.....	.....	55 54	75 79	12	5
.....	.....	325 40	.....	70 90	57 75	3 40	13 75	17 00	.....	40 85	203 65	121 75	6
.....	.....	363 26	.....	56 05	35 00	8 00	47 00	31 00	.....	125 07	302 12	61 14	7
.....	7 00	77 45	.....	17 00	.....	2 40	19 55	11 50	.....	.....	77 45	.....	8
.....	.....	419 13	.....	46 50	63 25	6 00	15 84	15 75	.....	15 00	162 34	256 79	9
.....	.....	253 04	57	29 25	39 50	2 97	9 60	.....	.....	.....	81 89	171 15	10
.....	.....	303 26	.....	59 35	44 25	16 50	38 50	.....	.....	14 50	173 10	130 16	11
1 25	.....	366 91	.....	3 50	42 83	10 75	16 75	.....	63 75	24 55	162 13	204 78	12
.....	.....	147 19	.....	29 75	25 00	10 50	26 60	13 00	.....	6 00	110 85	36 34	13
10 55	.....	302 50	.....	57 70	71 35	5 18	27 15	18 00	.....	23 85	203 23	99 27	14
5 97	.....	290 10	.....	27 00	40 00	3 84	23 25	3 35	.....	5 00	102 44	187 66	15
....	.....	294 43	.....	9 00	66 50	4 84	27 00	16 60	.....	5 50	129 44	164 99	16
16 14	.....	449 45	.....	8 00	52 75	4 33	47 25	7 25	.....	25 73	145 31	304 14	17
4 49	.....	275 45	.....	8 00	52 40	6 85	50 65	10 80	.....	32 60	161 30	114 15	18
.....	.....	118 96	.....	11 25	25 00	10 00	16 95	26 10	.....	5 30	94 60	24 36	19
.....	.....	148 35	.....	18 05	15 00	1 20	16 00	40 85	.....	7 25	98 35	50 00	20
.....	.....	142 52	.....	.....	71 65	.....	15 90	42 55	.....	.....	130 10	12 42	21
.....	.....	101 09	.....	4 00	25 00	2 86	18 75	16 40	.....	.....	67 01	34 08	22
.....	.....	108 11	.....	8 00	39 00	8 91	9 00	6 75	.....	20 35	92 01	16 10	23
.....	.....	126 36	.....	19 15	35 95	6 72	29 05	8 10	.....	5 00	103 97	22 39	24
.....	.....	103 56	.....	18 50	25 00	1 15	8 00	33 50	.....	6 90	93 05	10 51	25
.....	.....	229 48	.....	100 95	33 85	3 24	13 25	27 00	22 43	....	200 72	28 76	26
.....	.....	287 40	.....	50 75	66 05	11 60	16 35	.....	.....	5 00	149 75	137 65	27
95 85	.....	369 15	12 75	54 90	76 65	6 30	33 75	13 60	.....	145 00	342 95	26 20	28
11 20	.....	665 14	.....	97 55	107 30	28 60	53 75	81 25	.....	55 00	423 45	241 69	29
27 59	.....	574 91	.....	102 70	70 60	14 00	45 89	27 35	.....	137 07	397 61	177 30	30
25 00	.....	156 18	.....	35 50	35 00	10 75	26 50	10 00	.....	2 25	120 00	36 18	31
.....	.....	95 90	.....	10 50	28 00	5 00	7 00	45 00	.....	.....	95 50	40	32
.....	.....	169 21	.....	27 15	35 50	3 60	39 20	..	.....	18 65	124 10	45 11	33
9 23	.....	385 87	.....	83 75	50 00	6 73	30 00	39 00	.....	17 30	226 78	159 09	34
2 00	.....	300 71	.....	29 35	78 50	4 20	59 78	45 50	.....	59 15	276 48	24 23	35
.....	.....	236 09	.....	77 75	63 50	7 00	33 04	.....	.....	15 00	196 29	39 80	36
3 00	.....	104 71	.....	28 05	30 78	5 68	16 50	15 75	.....	.....	96 76	7 95	37
.....	.....	108 18	.....	.....	29 40	9 45	13 50	35 15	.....	4 25	91 75	16 43	38
48 89	.....	331 81	.....	45 65	30 00	5 18	8 85	21 00	.....	5 55	116 23	215 58	39
.....	.....	277 49	.....	60 21	45 15	4 85	21 75	17 25	.....	5 70	154 91	122 58	40
1 50	.....	80 45	.....	33 85	27 00	2 00	4 50	.....	.....	2 00	69 35	11 10	41
45 35	3 08	128 93	59 68	6 00	37 45	1 80	24 00	.....	.....	.....	128 93	.....	42
322 04	.....	409 54	50 50	45 05	.....	6 00	20 75	.....	.....	287 24	409 54	.....	43
87 00	.....	194 10	.....	126 40	15 00	3 05	24 00	.....	.....	21 00	189 45	4 65	44
.....	.....	95 38	.....	28 75	28 00	1 00	6 00	.....	.....	.....	63 75	31 63	45
.....	.....	308 35	.....	13 00	30 00	5 79	57 11	31 95	.....	28 30	166 15	142 20	46
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48
.....	.....	388 21	.....	48 10	79 45	13 75	47 34	.....	17 00	12 25	217 89	170 32	49
7 50	.....	397 51	.....	70 00	91 55	9 10	28 25	38 20	.....	30 00	267 10	130 41	50
....	.....	194 26	.....	21 30	36 00	3 65	28 10	13 25	.....	18 35	120 65	73 61	51
.....	.....	94 00	2 15	11 25	27 00	3 07	13 75	29 90	.....	5 00	92 12	1 88	52
.....	58	43 19	.. ....	13 25	12 00	1 84	12 10	.... ..	.....	4 00	43 19	.....	53
2 50	9 00	76 00	12 44	21 25	25 15	1 06	.....	12 10	.....	4 00	76 00	.....	54

REPORTS OF LOCAL FARMERS' INSTITUTES

Institute District.	Membership for year ending December, 1907.	Membership for six months ending June, 1908.	No. of Meetings held.	Total Attendance.	No. of papers read or addresses delivered.	Receipts.			
						Cash on hand per last report.	Members' fees.	Grants.	Receipts from conventions and excursions.
						$ c.	$ c.	$ c.	$ c.
55. Muskoka, South	126	115	9	297	20	13 32	28 50	25 00	9 75
56. Port Carling	25	27	2	49	9	2 18	6 75	.....	.....
57. Nipissing, West	27	9	7	57	8	....	14 50	25 00	.....
58. Norfolk, North	303	242	10	1,445	60	135 95	60 50	50 00	.....
59. Norfolk, South	132	146	6	805	30	55 11	29 50	50 00	.....
60. Northumberland, East	233	159	7	925	28	.....	.....	.....	.....
61. Northumberland, West	120	133	5	850	21	60 68	31 25	50 00	9 46
62. Ontario, North	187	183	11	661	40	62 77	48 75	50 00	152 75
63. Ontario, South	267	184	6	414	14	165 67	45 75	25 00	94 41
64. Oxford, North	289	236	11	1,605	44	108 35	58 25	50 00	114 15
65. Oxford, South	517	515	11	2,832	51	18 83	135 50	50 00	96 70
66. Parry Sound, East	128	115	15	906	76	95 01	27 00	25 00	185 35
67. Parry Sound, West	69	70	.....	.....	.....	.....	.....	.....	.....
68. Peel	494	428	13	2,127	72	75 43	113 50	60 00	171 30
69. Perth, North	345	321	9	1,340	30	191 30	78 75	50 00	85 85
70. Perth, South	458	373	8	2,490	40	415 21	91 00	50 00	132 05
71. Peterborough, East	115	116	9	1,603	35	3 54	22 75	50 00	51 50
72. Peterborough, West	191	166	10	1,215	58	23 44	43 50	50 00	51 50
73. Prescott	79	79	5	723	9	72 52	22 00	50 00	.....
74. Prince Edward	175	192	8	970	30	50 31	46 75	75 00	.....
75. Rainy River, South	111	24	11	263	19	44 36	23 50	25 00	.....
76. Renfrew, North	87	97	6	643	12	1 29	20 50	50 00	.....
77. Renfrew, South	85	120	7	722	21	90 08	26 00	50 00	.....
78. Russell	143	221	6	725	23	4 72	36 00	25 00	.....
79. Simcoe, Centre	386	304	13	687	34	250 13	46 00	75 00	150 75
80. Simcoe, East	161	109	10	445	18	112 11	24 75	75 00	87 90
81. Simcoe, South	203	162	8	920	25	32 00	34 50	75 00	50 00
82. Simcoe, West	235	157	7	1,188	27	122 18	39 00	75 00	.....
83. St. Joseph Island	94	55	7	3,346	23	14 82	13 60	50 05	.....
84. Stormont	99	275	12	1,404	58	14 50	72 50	50 00	.....
85. Temiscamingue	12	34	11	569	28	27 43	30 75	25 00	.....
86. Victoria, East	195	181	10	1,434	38	.....	48 75	60 00	.....
87. Victoria, West	149	166	6	748	41	37 79	49 40	50 00	15 22
88. Waterloo, North	585	658	15	3,260	58	73 30	150 25	50 00	56 66
89. Waterloo, South	769	626	14	2,691	34	.....	196 00	50 50	162 55
90. Welland	300	253	11	1,142	42	248 31	56 50	50 00	124 37
91. Wellington, Centre	664	516	12	4,515	65	112 22	131 50	50 00	28 75
92. Wellington, East	369	231	8	1,055	29	.....	61 25	50 00	35 78
93. Wellington, South	360	381	6	1,215	4	83 48	579 50	50 00	.....
94. Wellington, West	252	228	7	2,200	32	155 12	57 00	50 00	1 03
95. Union	115	99	7	875	16	136 80	31 75	37 50	30 35
96. Wentworth, North	281	305	10	1,665	28	16 45	74 25	50 00	.....
97. Wentworth, South	326	308	10	1,553	55	3 27	73 00	50 00	.....
98. York, East	236	260	17	867	30	40 34	58 50	50 00	51 00
99. York, North	120	113	6	295	12	44 16	27 75	50 00	65 00
100. York, West	196	197	8	730	38	90 90	40 25	50 00	83 40
TOTAL	21,187	19,804	875	110,415	3,180	7,900 71	5,289 90	4,611 55	3,983 15

FOR YEAR ENDING JUNE 30th, 1908.—*Continued.*

Receipts.—*Con.*			Expenditure.										
Miscellaneous.	Balance due Treasurer.	Total Receipts.	Due Treasurer per last report.	Expense for Meetings.	Officers' and Secretary's salaries and expenses.	Postage and Stationery.	Printing and advertising.	Lecturers' expenses and wages.	Periodicals for Members.	Miscellaneous.	Total expenditure.	Balance on hand.	No.
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
1 61	.....	78 18	.....	19 20	25 00	3 96	10 75	.....	.....	5 35	64 26	13 92	55
.....	.....	8 93	.....	.....	.....	2 00	1 75	.....	2 25	.....	6 00	2 93	56
.....	.....	.....	.....	2 00	15 00	2 50	3 75	.....	.....	.....	23 25	16 25	57
.....	.....	246 45	.....	70 28	50 00	7 00	17 00	27 00	.....	16 50	187 78	58 67	58
.....	.....	134 61	.....	16 50	56 15	3 64	32 15	15 45	.....	5 00	128 89	5 72	59
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60
.....	.....	151 39	.....	24 25	19 10	4 55	18 25	7 75	.....	17 79	91 69	59 70	61
2 65	.....	317 92	.....	7 35	121 50	6 65	44 63	53 65	.....	32 79	266 57	51 35	62
.....	.....	330 83	.....	27 55	65 00	9 11	81 35	.....	.....	.....	183 01	147 82	63
.....	.....	330 75	.....	55 25	52 25	6 30	97 10	46 60	.....	5 25	262 75	68 00	64
7 43	.....	308 46	.....	43 50	58 37	22 79	85 45	56 15	.....	36 60	302 86	5 60	65
.....	.....	332 36	.....	69 50	56 95	18 15	36 65	26 35	.....	20 75	228 35	104 01	66
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67
22 10	.....	442 33	.....	119 35	106 95	7 68	53 75	45 50	.....	68 87	402 10	40 23	68
15 85	.....	421 75	.....	40 00	83 15	12 05	84 59	29 05	.....	32 75	281 59	140 16	69
12 57	.....	700 83	.....	79 90	130 25	15 36	59 90	41 40	7 00	.....	333 81	367 02	70
.....	.....	127 79	.....	18 45	35 00	2 75	22 65	12 75	.....	10 00	101 60	26 19	71
6 00	.....	174 44	.....	33 50	39 90	7 00	32 30	18 25	.....	4 00	134 95	39 49	72
.....	.....	144 52	.....	31 60	20 00	3 10	13 25	11 35	.....	.....	79 30	65 22	73
1 53	.....	173 59	.....	10 25	30 00	2 00	20 60	27 15	.....	20 00	110 00	63 59	74
.....	.....	92 86	.....	16 45	15 00	3 00	10 50	.....	.....	.....	44 95	47 91	75
.....	1 91	73 70	.....	7 50	25 00	12 40	21 70	2 00	.....	5 10	73 70	.....	76
.....	.....	166 08	.....	21 00	26 50	1 18	42 79	13 60	.....	6 16	111 23	54 85	77
.....	.....	65 72	.....	3 00	29 00	11 29	7 00	7 30	.....	5 00	62 59	3 13	78
.....	.....	521 88	.....	71 00	91 75	4 50	37 50	46 00	.....	8 75	259 50	.....	79
3 95	.....	303 71	.....	40 35	43 70	4 50	63 40	.....	.....	40	152 35	151 36	80
.....	.....	191 50	.....	24 00	33 90	2 35	21 25	30 40	.....	21 00	132 90	58 60	81
23 70	.....	259 88	.....	88 30	42 00	9 56	17 67	.....	35 75	20 00	213 28	46 60	82
.....	.....	78 47	.....	27 00	25 00	4 25	11 75	.....	.....	9 00	77 00	1 47	83
90	.....	137 90	.....	54 25	27 50	2 60	16 00	10 00	.....	5 00	115 35	22 55	84
.....	.....	.....	.....	11 00	2 00	2 22	27 80	.....	.....	50	43 52	39 66	85
18 30	.....	127 05	11 11	35 75	20 00	6 95	20 25	20 45	.....	5 00	119 51	7 54	86
.....	.....	152 41	.....	33 00	25 00	10 40	23 20	9 20	12 65	5 00	118 45	33 96	87
.....	.....	330 21	.....	48 15	113 00	27 99	45 00	40 60	.....	29 60	304 34	25 87	88
14 43	.....	422 98	2 17	74 06	131 85	9 77	.....	63 75	.....	139 78	421 38	1 60	89
.....	.....	479 18	.....	86 10	71 10	5 00	16 40	8 50	.....	42 35	229 45	249 73	90
9 75	.....	332 22	.....	74 95	75 17	10 38	24 75	15 57	.....	90 53	291 35	40 87	91
.....	.....	147 03	17 87	22 30	34 90	5 25	33 05	15 25	.....	8 50	137 12	9 91	92
12 20	.....	725 18	.....	10 48	55 95	10 25	27 00	.....	.....	515 50	619 18	106 00	93
.....	.....	365 12	.....	48 70	37 00	8 25	32 40	19 00	.....	35 00	180 35	184 77	94
3 70	.....	240 10	.....	26 45	33 00	1 75	12 50	17 00	.....	25 00	115 70	124 40	95
.....	.....	140 70	.....	44 55	39 50	5 79	18 89	.....	.....	9 00	117 73	22 97	96
.....	30 65	156 92	.....	25 00	62 10	14 10	36 35	6 00	.....	13 37	156 92	.....	97
2 00	.....	201 84	.....	28 25	61 97	18 43	37 25	9 96	.....	35 00	190 86	10 98	98
.....	.....	186 91	.....	24 90	30 50	15 12	52 42	.....	.....	12 25	135 19	51 72	99
.....	.....	264 55	.....	36 20	84 00	17 80	55 50	.....	.....	36 00	229 50	35 05	100
935 72	52 22	22,773 25	69 24	3,504 03	4,334 52	678 12	2,617 64	1,610 73	160 83	2,710 49	15,785 60	6,987 65	

ATTENDANCE, MEMBERSHIP, ETC., FOR 1907-1908.

Never before in the history of Ontario Institutes were so many meetings cancelled and others poorly attended on account of unfavorable weather and roads. The results compared with the previous year, are fairly satisfactory.

From many localities comes the report that farmers who would gladly attend the Institute meetings are not able to do so because of lack of help in the winter months. On the whole, the interest in the meetings was well maintained. A greater number of special meetings were held during the past year than in any previous year—dairy meetings, fruit meetings, poultry meetings, judging classes, etc.; and when we total the attendance at all these meetings, it is thousands in excess of the attendance in any previous year; so while we may not be reaching quite so many people directly through the Farmers' Institutes, we are reaching larger numbers than ever, and are able to give more direct information upon the line or lines in which the farmers in different localities are interested.

The Institutes holding the largest number of meetings during the year ending May 31st, 1908, are:—

Algoma, C.	25	Halton	12	Rainy River, S.	11
Hastings, N.	20	Huron, E.	12	Temiscamingue	11
Algoma, North Shore	17	Stormont	12	Welland	11
Dufferin	17	Wellington, C.	12	Brant, N.	10
York, E.	17	Durham, E.	11	Huron, S.	10
Parry Sound, E.	15	Essex, N.	11	Lambton, W.	10
Waterloo, N	15	Grenville, S.	11	Norfolk, N.	10
Waterloo, S.	14	Grey, N.	11	Peterboro, W.	10
Grey, C.	13	Middlesex, E.	11	Simcoe, E.	10
Haldimand	13	Ontario, N.	11	Victoria, E.	10
Peel	13	Oxford, N.	11	Wentworth, N.	10
Simcoe, C.	13	Oxford, S.	11	Wentworth, S.	10

The Institutes having the largest attendance at their meetings are as follows:—

	No. of Meetings.	No. in Attendance.		No. of Meetings.	No. in Attendance.
Wellington, C.	12	4,515	Bruce, S.	7	2,351
St. Joseph's Island	7	3,346	Halton	12	2,223
Waterloo, N.	15	3,260	Wellington, W.	8	2,225
Oxford, S.	11	2,832	Haldimand	13	2,170
Waterloo, S.	14	2,691	Peel	13	2,127
Lincoln	9	2,660	Huron, S.	10	1,945

The Institutes having the largest membership for the year 1907, are:—

Waterloo, S.	769	Simcoe, C.	386	Glengarry	325
Wellington, C.	664	Wellington, E.	369	Bruce, W.	321
Waterloo, N	585	Wellington, S.	360	Middlesex, N.	307
Halton	557	Haldimand	356	Grey, C.	303
Oxford, S.	517	Brant, S.	353	Norfolk, N.	303
Peel	494	Huron, E.	350	Lambton, W.	300
Perth, S.	458	Perth, N.	345	Welland	300
Dufferin	389	Wentworth, S.	326	Oxford, N.	289

The Institutes having the smallest membership for the year 1907, are:—

Temiscamingue	12	Manitoulin, E.	74	Amherst Island	84
Port Carling	25	Manitoulin, W.	74	Renfrew, S.	85
Nipissing, W.	27	Prescott	79	Frontenac	87
Parry Sound, W.	69	Lanark, S.	81	Brockville	88
Addington	73	Leeds, N.	82	St. Joseph Island	94

SPECIAL NORTHERN MEETINGS HELD DURING THE SUMMER OF 1908.

Following the custom of the past three years we arranged for meetings to be held in Muskoka, Parry Sound, Temiscamingue, Manitoulin, St. Joseph Island, Algoma, Nipissing, Thunder Bay and Rainy River Districts during the summer season. Two speakers, a gentleman and lady, were sent on each deputation. As the full list appears in Part II. of the Women's Institute report we think it well to merely refer to the matter here, and state that the total number of such meetings held was 106, the meetings were well attended and appreciated. Judging from the reports received from officers of Farmers' and Women's Institutes and the delegates who attended the meetings, the work of the Department in the interests of Agriculture and the betterment of home conditions is much appreciated throughout the northern sections of the Province.

A special series for the northern portions of Hastings, Peterboro and Victoria, and the County of Haliburton was held during the month of June. The same system was adopted here as in the far northern sections of the Province. Thirty-one meetings were held in these districts.

SPECIAL FRUIT, VEGETABLE AND POULTRY INSTITUTES.

In keeping pace with the tendency of the times, many of the most progressive farmers of our Province are giving attention to some special line or lines of production. For some time the Department has appreciated the necessity for an educational campaign along such special lines. While it was felt that the subjects could receive no exhaustive treatment in a one-day Institute, still it was considered doubtful as to whether or not the same farmers would attend a longer course of instruction.

However, a Fruit Institute was put on at Grimsby, December 16, 17 and 18, with the following programme:—

Mr. H. S. Peart, Director of the Horticultural Experiment Station, located at Jordan Harbor, will take direct charge of the work. In addition to the lectures announced for the various topics to be taken up, local men will be asked to give their experiences and to assist in the discussions.

Those who intend to take advantage of the full three days' instruction will please send their names to *H. S. PEART, Jordan Harbor* In order to secure the greatest benefit from the course offered, it is necessary that one attend every session. Those who cannot arrange to do this will be allowed to attend such sessions as they think will prove of greatest interest and benefit. It must be remembered, however, that those who make application and agree to attend all the lectures will be given special consideration.

As much practical work as possible will be afforded those in attendance. Such topics as pruning, grafting, budding and packing will be demonstrated. It is to be hoped that the fruit growers and their sons in the Niagara Peninsula will take advantage of this course. The success of this Fruit Institute will be a guide to the Department as to whether or not to undertake similar work in other localities.

The Boys are Urged to Attend

Send Applications to

H. S. PEART, B.S.A.

Jordan Harbor, Ont.

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Ontario Farmers' Institutes

FRUIT INSTITUTE

Short Course for Fruit Growers to held at

GRIMSBY

December 16, 17 and 18, 1907

Under the Joint Auspices of the

Provincial Department of Agriculture

The Provincial Fruit Growers' Association

and

The Local Farmers' Institute

Local Directors for Fruit Growers' Ass'n

Wentworth—E. D. SMITH, Winona
Lincoln—GEO. A. ROBERTSON, St. Catharines
Halton and Peel—A. W. PEART, Burlington

Lincoln Farmers' Institute

D. H. MOYER, Campden, President
J. PAWLING, Port Dalhousie, Secretary

South Wentworth Farmers' Institute

J. H. McNEILLY, Stoney Creek, President
EBLAND LEE, Stoney Creek, Secretary

GEO. A. PUTNAM, Superintendent of Farmers' Institute.

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Fruit Institute

Course of Instruction and Lectures

Morning Sessions 9.30 to 12
Afternoon " 1.30 to 4

Monday, December 16th, 1907

Morning Session—H. S. Peart, Jordan Harbor

Causes of Failure in Fruit Growing
Site and Location of Orchard

Afternoon Session—W. H. Bunting, St. Catharines

Kind and Preparation of Soils
Decide on the Fruit to be Grown
Varieties—Why and When
Their Adaptation to Special Location

Tuesday, December 17th

Morning Session—W. H. Bunting, St. Catharines

The Methods of Setting and Pruning to Form and Type
High vs. Low Heads

Afternoon Session—H. S. Peart, Jordan Harbor

Tillage and Fillers
The Use of Vegetables as Fillers
Orchard Cover Crops
Orchard Implements and Harness

Wednesday, December 18th

Morning Session—J. W. Crow, Guelph
J. P. Carey, Toronto

Grafting, Budding, Pruning
J. W. Crow, Guelph
The Relation of Parent to Scion
J. W. Crow, Guelph
Picking, Packing and Shipping
J. P. Carey, Torooto

Afternoon Session—J. W. Crow, O.A.C., Guelph

Insects
Fungus Diseases

Fruit Institute

IN order that the Fruit Growers of the District surrounding Grimsby may have an opportunity to receive special instruction upon the topics indicated in in this programme, arrangements have been made for holding a **Fruit Institute** at that place on December 16, 17 and 18. It has been demonstrated during the past season in many sections of the Province that Fruit Growing is one of the most profitable lines of Agriculture, and the men who are following improved methods are being reimbursed many times over for their extra trouble and expense involved. The time is opportune for giving fruit growers, whether upon a large or small scale, an opportunity to receive instruction near their homes. The Provincial Department, of Agriculture and the Local Farmers' Institutes have, therefore, arranged for a course as indicated herein We wish it clearly understood that the young men and the boys of the locality are specially invited to take advantage of the instruction given. The lectures and practical work will of course be of interest and value to the experienced fruit growers as well; in fact, the success of the Institute will depend largely upon their attendance and the part which they take in the discussions. It is expected that some of those who attend this special Fruit Institute will see the advantage of such instruction and decide to take the longer course to be given at **Guelph,** January 27 to February 8, 1908.

Another Fruit Institute was put on at Trenton, December 18, 19 and 20. These two Institutes were markedly successful. The majority of those in attendance the first day remained throughout the entire course of lectures, and their expression of appreciation of the work carried on at these two points was so enthusiastic that an announcement was made that the Department would be prepared to put on a similar series of meetings at other points in the Province, provided 15 or more petitioners applied for the same, stating that they would attend the full course. Applications on this basis were so numerous that the number of petitioners required was shortly raised to 25—the idea being to put on such special meetings at points where the attendance would be sufficient to warrant the expenditure, and where the amount of money expended would be productive of the greatest good.

Fruit Institutes.

The following special Fruit Institutes have been held:—

		*Number
Grimsby	Dec. 16, 17, 18, 1907	100
Trenton	Dec. 19, 20 "	50
Leamington	Feb. 10, 11, 12, 1908	140
Jordan	Feb. 17, 18, 19, "	80
Stoney Creek	Feb. 20, 21, "	125
Waterdown	Mar. 9, 10, 11, "	330
Thornbury	Mar. 11, 12, "	24
Oakville	Mar. 12, 13, "	55
Meaford	Mar. 13, 14, "	22
Simcoe	Mar. 17, 18, 19, "	169
Dunnville	Mar. 18, 19, 20, "	150
Oshawa	Mar. 24, 25, "	300
Owen Sound	Mar. 26, 27, "	35
Burlington	Mar. 26, "	85
Iroquois	Apr. 15, 16, "	22

Speakers and subjects for above meetings:—

No two courses covered the same ground; and it is understood that only a small proportion of the subjects given below were taken up at any one place.

Peart, H. S.—"Causes of Failure in Fruit Growing," "Site and Location of Orchards," "Tillage and Fillers," "The Use of Vegetables as Fillers," "Orchard Cover Crops," "Orchard Implements and Harness," "Grafting, Budding and Pruning," "The Relation of Parent to Scion, "Pruning and Grafting," "Study of Tree Growth and Fruiting Habits as a Basis for Pruning," "Shelter Belts in Relation to Different Kinds of Fruit," "Management and Care of Bearing Orchards," "Progress in Experimental Work," "Fertilizers and Manures."

Boughner, Elias, Simcoe.—"The Results of Co-operation in Fruit Growing in the County of Norfolk."

Bunting, W. H., St. Catharines.—"Kind and Preparation of Soils," "Decide on the Fruit to be Grown," "Varieties—Why and When," "Their Adaptation to Special Location," "The Methods of Setting and Pruning to Form and Type," "High vs. Low Heads."

Carey, J. P., Toronto.—"Picking, Packing and Shipping."

Crow, J. W., O.A.C., Guelph.— "Grafting, Budding, Pruning," "The Relation of Parent to Scion," "Insects," "Fungus Diseases," "San José Scale," "Grape Growing."

* Actual number of persons who availed themselves of these courses.

Dempsey, W. H., Trenton.—"Varieties—Why and When," "Their Adaptation to Special Location."

Harkness, A. D., Irena.—"Varieties for the Districts."

Harcourt, Prof. R., O.A.C., Guelph.—"Chemistry of Drainage and Cultivation," "Chemical Fertilizers," "Fertilizers and Manures."

Hilborn, J. L., Leamington.—"Soil Tillage and Fillers," "Tomato Growing," "Orchard Cover Crops and Winter Protection," "Co-operative Packing and Selling of Fruit and Vegetables."

Hutt, Prof. H. L., O.A.C., Guelph.—"Decoration of Home Grounds," "Pruning and Grafting," "The Relation of the Parent to the Scion," "Home Decoration and Vegetable Gardens."

Jarvis, T. D., O.A.C., Guelph.—"Birds in Relation to Horticulture," "Fungus and Insect Pests," "Insects and Diseases affecting Fruit and Vegetables."

Jones, Harold, Maitland.—"The Methods of Setting and Pruning to Form and Shape," "High vs. Low Heads."

Johnston, J. E., Simcoe.—"Success with Strawberries," "Preparation and Application of Spraying Mixtures," Spraying, Picking, Packing and Marketing."

Johnson, O. W., Rockford, Ill.—"Success in Growing Apples to Demand the Best Prices."

McCalla, W. C., St. Catharines.—"Tomatoes."

McCullough, Mr., Hamilton.—"Decoration of Home Grounds."

McKenney, A., Essex.—"San José Scale," "Vegetable and Tobacco Fertilizers."

McMeans, A., Agricultural College, Guelph.—"Use of Vegetables as Fertilizers," "Tomato Growing," "Onion Growing," "Other Vegetables for Essex County."

McNeil, A., Ottawa.—"Picking, Packing and Marketing."

Rittenhouse, S. H., Jordan Harbor.—"Success with Strawberries," "Strawberries."

Rivett, T. B., Toronto.—"Necessity for Inspection of Treatment for San José Scale."

Thompson, Robt., St. Catharines.—"Packing and Marketing," "Varieties, When and Where to Grow Them," "Location for Orchards and Fruit Plantations," "Selection of Soil for Different Classes of Fruits."

Peart, A. W., Burlington.—"Sites, Soils and Location for Orchards," "Locations for Orchards and Fruit Plantations," "Selection of Soil for Different Classes of Fruits."

Vegetable Institutes.

The Department also sent speakers to the following special Vegetable Institutes:—Sarnia, January 24; London, January 25; Toronto, February 1; Hamilton, February 22; Toronto, March 7; Chatham, April 6; Ottawa, April 14, and to the following Special Poultry Institutes:—Leamington, December 19; Morrisburg, February 24 and 25; Perth, February 26 and 27.

CO-OPERATIVE MEETINGS.

Because of the number of meetings which were held as special Fruit Institutes, covering one or more days in one place, opportunity was given to discuss co-operation much more fully than has been the case in years past, so

this year it was not considered quite so necessary to put on the usual number of special Co-operative Fruit Meetings. The two following meetings were the only ones held: Arkona, April 22; Georgetown, April 16.

SPECIAL SEED MEETINGS.

The Seed Branch of the Dominion Department of Agriculture, and the Farmers' Institute Branch of the Provincial Department of Agriculture again co-operated in the holding of special Seed Meetings. The general topics discussed at these meetings were—"Improvement of Seed and Eradication of Weeds." This important branch of our Educational work met with a very encouraging response. In 1907, 36 seed meetings were held; in 1908, 38 meetings were held as follows:—

Division 1.—Speaker, Mr. T. G. Raynor, Ottawa, Ont.

1. Taunton, Jas. Leask's farm	7 p.m	W. Durham	June 10
2. Courtice, farm of Arthur E. Osborne	7 p.m	W. Durham	June 11
3.*Bowmanville, A. E. Bellman's farm	2 p.m	W. Durham	June 12
Council Chamber	7 p.m	W. Durham	June 12
4. Newcastle, F. Allin's farm	2 p.m	W. Durham	June 13
Town Hall	7 p.m	W. Durham	June 13
5. Bethany, Town Hall	7 p.m	E. Durham	June 15
6. Oakwood, Town Hall	2 p.m	W. Victoria	June 16
7.*Lindsay, Town Hall	7 p.m	W. Victoria	June 16
8. Cambray, Tamlin's Hall	2 p.m	W. Victoria	June 17
9. Eenelon Falls, Dickson's Hall	2 p.m	E. Victoria	June 18
10. Dunsford, Old Church	2 p.m	E. Victoria	June 19
11. Warsaw, Town Hall	7 p.m	E. Peterboro	June 20
12.*Norwood, Town Hall	2 p.m	E. Peterboro	June 22
13. Stirling, Opera House	7 p.m	N. Hastings	June 23
14.*Madoc, St. Lawrence Hall	2 p.m	N. Hastings	June 24
15. Perth, Town Hall	7 p.m	S. Lanark	June 25
16. Winchester	7 p.m	Dundas	June 26
17. Morrisburg	7 p.m	Dundas	June 27
18. Plantaganet	2 p.m	Prescott	June 29
19. Hawkesbury	7 p.m	Prescott	June 30

Division 2.—Speaker, Mr. T. H. Mason, London, Ont.

1.*Wiarton, Town Hall	2 p.m	N. Bruce	June 10
2. Hepworth, Spring Creek School	7 p.m	N. Bruce	June 11
3. Holstein	7 p.m	S. Grey	June 12
4. Milverton	7 p.m	N. Perth	June 13
5.*Bellwood, Town Hall	2 p.m	C. Wellington	June 15
6. Erin	7 p.m	C. Wellington	June 16
7. Inglewood	7 p.m	Peel	June 17
8. Acton, Town Hall	7 p.m	Halton	June 18
9. Maple	7 p.m	W. York	June 19
10. Aurora	7 p.m	N. York	June 20
11. Victoria Square, Public Hall	7 p.m	E. York	June 22
12. Box Grove, Foresters' Hall	7 p.m	W. York	June 23
13. Whitevale	7 p.m	S. Ontario	June 24

Division 3.—Speaker, Mr. W. S. Fraser, Bradford, Ont.

1.*Duntroon	2 p.m	W. Simcoe	June 10
2. Meaford, White's School, 11 Con. St Vincent	7 p.m	N. Grey	June 11
3.*Owen Sound	2 p.m	N. Grey	June 12
4.*Walkerton, School	2 p.m	S. Bruce	June 13
5. Nestleton, D. Malcom's farm	2 p.m	W. Durham	June 16
Foresters' Hall	7 p.m	W. Durham	June 16
6. Port Perry	7 p.m	S. Ontario	June 17

Note.—*Annual Meetings of local Farmers' Institutes were held on same date and at same place.

INSTITUTE MEETINGS AND DELEGATES THEREFOR.

REGULAR MEETINGS.

1908-09.

It is usual to have afternoon and evening sessions at each place. The exact hour of meeting is decided by the officers of the Institute concerned and local announcements made accordingly.

DIVISION 1. H. G Reed, V. S., Georgetown., Jan. 6 to 30; A. Groh, Preston, Jan. 15 to 30; Miss S. Campbell, Brampton, Jan. 6 to 16.

1	Kincardine, Town Hall	Centre Bruce	January	6
2	Ripley, Township Hall	Centre Bruce	"	7
3	Holyrood, Township Hall	South Bruce	"	8
4	Lucknow, Town Hall	South Bruce	"	9
5	Auburn, Orange Hall	West Huron	"	11
6	Kintail, Young's Hall	West Huron	"	12
7	Brussells, Town Hall	East Huron	"	13
8	Wroxeter, Town Hall	East Huron	"	14
9	Durham, Town Hall	South Grey	"	15
10	Hanover, Telfor's Hall	South Grey	"	16
11	Wiarton, Town Hall	North Bruce	"	18
12	Spring Creek, School House	North Bruce	"	19
13	Tara, Vandusen's Hall	West Bruce	"	20
14	Port Elgin, Town Hall	West Bruce	"	21
15	Lakelet, Temperance Hall	Union	"	22
16	Lavery's School House	Union	"	22
17	Acton, Town Hall	Halton	"	25
18	Ballinafad, Temperance Hall	Halton	"	26
19	Norval, Orange Hall	Halton	"	27
20	Hornby, Orange Hall	Halton	"	28
21	McCurdy's Cors., School House	Halton	"	29
22	Sheridan, Temperance Hall	Halton	"	30

DIVISION 2. W. F. Kydd, Simcoe, Jan. 6 to 28; W. C. Shearer, Bright, Jan. 6 to 12; R. R. Elliott, Owen Sound, Jan. 18 to 28; Mrs. M. L. Ashley, Londesboro, Jan. 12 to 16, 21.

1	Atwood, Agricultural Hall	North Perth	January	6
2	Millbank, Ritter's Hall	North Perth	"	7
3	Mitchell, Town Hall	South Perth	"	8
4	St. Mary's, Town Hall	South Perth	"	9
5	Brucefield, Dixon's Hall	South Huron	"	11
6	Exeter, Town Hall	South Huron	"	12
7	Coldstream, Town Hall	North Middlesex	"	13
8	Beechwood, Forresters' Hall	North Middlesex	"	14
9	Ailsa Craig, Town Hall	North Middlesex	"	15
10	Parkhill, Town Hall	North Middlesex	"	16
11	Forest, Town Hall	East Lambton	"	18
12	Wyoming, Butler's Hall	East Lambton	"	19
13	Petrolea, Town Hall	West Lambton	"	20
14	Brigden, McKenzie's Hall	West Lambton	"	21
15	Melbourne, Woodmans' Hall	West Middlesex	"	22
16	Middlemiss, Village Hall	West Middlesex	"	23
17	Ilderton, I. O. F. Hall	East Middlesex	"	25
18	Wilton Grove, School House	East Middlesex	"	26
19	Kintore, Company's Hall	North Oxford	"	27
20	Plattsville	North Oxford	"	28

DIVISION 3. Duncan Anderson, Orillia, Jan. 7 to 28; J. L. Hilborn, Leamington, Jan. 7 to 21; A. McKenney, Essex, Jan. 22 to 28;

1	Bealton, Bealton's Hall	North Norfolk	January	7
2	Waterford, Town Hall	North Norfolk	"	8
3	Delhi, Morgan's Hall	North Norfolk	"	9
4	Courtland, Town Hall	North Norfolk	"	11
5	Norwich, Town Hall	South Oxford	"	12

REGULAR MEETINGS.—*Continued.*

6	Mt. Elgin, Foresters' Hall	South Oxford	"	13
7	Aylmer, Opera House	East Elgin	"	14
8	Shedden, Morrison's Hall	West Elgin	"	15
9	West Lorne, Township Hall	West Elgin	"	16
10	Morpeth, A. O. U. W. Hall	East Kent	"	18
11	Kent Centre, K. C. Hall	East Kent	"	19
12	Croton, Young's Hall	East Kent	"	20
13	Dawn Mills, Township Hall	East Kent	"	21
14	Tupperville, Hall	West Kent	"	22
15	Eberts, Township Hall	West Kent	"	23
16	Comber, Town Hall	North Essex	"	25
17	Oldcastle, Town Hall	North Essex	"	26
18	Kingsville, Town Hall	South Essex	"	27&28

DIVISION 4. T. G. Raynor, Ottawa, Jan. 7 to 30; W. F. Stephen, Huntingdon, Quebec, Jan. 7 to 20; L. Ceaser, O.A.C., Guelph, Jan. 21 to 26; E. J. Zavitz, O.A.C., Guelph, Jan. 27 to 30; Miss Isabel Rife, Hespeler, Jan. 9, 13 to 19, 27 to 28.

1	Palermo, Temperance Hall	Halton	January	7
2	Nelson Village, McGregor's Hall	Halton	"	8
3	Waterdown, Township Hall	North Wentworth	"	9
4	Freelton, McFarlane's Hall	North Wentworth	"	11
5	Rockton, Township Hall	North Wentworth	"	12
6	St. George, Library	North Brant	"	13
7	Onondaga, Township Hall	North Brant	"	14
8	Burford, Barnes' Hall	South Brant	"	15
9	Mohawk, Methodist Church Basement	South Brant	"	16
10	Ancaster, Town Hall	South Wentworth	"	18
11	Stoney Creek, Institute Hall	South Wentworth	"	19
12	Campden, Hedden's Hall	Lincoln	"	20
13	St. Davids, School House	Lincoln	"	21
14	Crowland, Township Hall	Welland	"	22
15	Humberstone, Township Hall	Welland	"	23
16	Pelham Centre, Town Hall	Monck	"	25
17	Canborough, Town Hall	Monck	"	26
18	Fisherville, Town Hall	Haldimand	"	27
19	Hagersville, McDonald's Hall	Haldimand	"	28
20	Vittoria, Lecture Room	South Norfolk	"	29
21	Langton, Town Hall	South Norfolk	"	30

DIVISION 5. C. W. Nash, Toronto, Jan. 6 to 29; J. Gardhouse, Highfield, Jan. 8 to 16; J. W. Lennox, Newton Robinson, Jan. 18 to 29; Miss M. Yates, Jan. 6 to 15, 28 to 29.

1	Aberfoyle, Town Hall (evening)	South Wellington	January	6
2	Arkell, School House (evening)	South Wellington	"	7
3	Waterloo, Town Hall	North Waterloo	"	8
4	Winterbourne, Hall	North Waterloo	"	9
5	Glen Allan, Hall	West Wellington	"	11
6	Moorefield, Township Hall	West Wellington	"	12
7	Drayton, Town Hall	West Wellington	"	13
8	Arthur, Town Hall	East Wellington	"	14
9	Damascus, Township Hall	East Wellington	"	15
10	Colbeck, St. Clemens Ch.	East Wellington	"	16
11	Grand Valley	East Wellington	"	18
12	Chatsworth, Foresters' Hall (afternoon)	North Grey	"	19
13	Desboro, Township Hall (evening)	North Grey	"	19
14	Kilsyth, Township Hall	North Grey	"	20
15	Leith, Leith's Hall	North Grey	"	21
16	Kemble, School (afternoon)	North Grey	"	22
17	Brown's School House (evening)	North Grey	"	22
18	Owen Sound, Council Chamber	North Grey	"	23
19	Strathavon, Foresters' Hall	North Grey	"	25
20	Strathnairn, School House	North Grey	"	26
21	Meaford, Town Hall	North Grey	"	27
22	Newton Robinson, Orange Hall	South Simcoe	"	28
23	Thornton, Orange Hall	South Simcoe	"	29

REGULAR MEETINGS.—*Continued.*

DIVISION 6. Dr. J. Standish, Walkerton, Dec. 3 to 5; Miss G. Gray, Toronto, Dec. 3 and 4;

1	Bethany, Church Basement	Centre Wellington	December 3
2	Metz, Orange Hall	Centre Wellington	" 4
3	Ospringe, School House	Centre Wellington	" 5

DIVISION 7. H. G. Reed, V.S., Georgetown, Nov. 23 to Dec. 15; A. E. Calnan, Allisonville, Nov. 23 to Dec. 1; Duncan Anderson, Orillia, Dec. 14 to 18; J. Standish, V.S., Walkerton, Dec. 16 to 18; Miss Susie Campbell, Brampton, Nov. 23 to 28; Feb. 11 to 12; Miss L. Shuttleworth, Guelph, Dec. 2, 3, 7 and 8; Wm. Smith, Columbus, Ont., Feb. 9 to 12; Speaker to be chosen, Jan. 19 to 22.

1	Shelburne, Town Hall	Dufferin	November 23
2	Orangeville, Town Hall	Dufferin	" 24
3	Palgrave, Town Hall	Peel	" 25
4	Streetsville, I.O.F. Hall	Peel	" 26
5	Woodbridge, Orange Hall	West York	" 27
6	Weston, Dufferin Hall	West York	" 28
7	Schomberg, Village Hall	North York	" 30
8	Aurora, Town Hall	North York	December 1
9	Agincourt, Temperance Hall	East York	" 2
10	Unionville, Victoria Hall	East York	" 3
11	Sunderland, Township Hall	North Ontario	" 4 & 5
12	Stouffville, Council Chamber	East York	" 7
13	Scarboro Junction	East York	" 8
14	Pontypool, Orange Hall (afternoon)	East Durham	" 14
15	Bethany, Town Hall (evening)	East Durham	" 14
16	South Monaghan, School House (afternoon)	East Durham	" 15
17	Millbrook, Town Hall (evening)	East Durham	" 15
18	Kendal, Foresters' Hall (afternoon)	West Durham	" 16
19	Orono, Council Chamber (evening)	West Durham	" 16
20	Bowmanville, Council Chamber	West Durham	" 17
21	Hampton, Town Hall	West Durham	" 18
22	Greenbank	South Ontario	January 19
23	Port Perry (afternoon)	South Ontario	" 20
24	Utica (evening)	South Ontario	" 20
25	Myrtle	South Ontario	" 21
26	Columbus	South Ontario	" 22
27	Claremont	South Ontario	February 9
28	Whitevale	South Ontario	" 10
29	Pickering	South Ontario	" 11
30	Kinsale	South Ontario	" 12

DIVISION 8. W. F. Kydd, Simcoe, Dec. 4 to 19; F. H. Reed, Lindsay, Dec. 4 to 5; A. M. Campbell, Maxville, Dec. 12 to 19; Mrs. Colin Campbell, Windsor, Dec. 4 to 11; Miss L. Shuttleworth, Guelph, Dec. 19.

1	Woodville, Villlage Hall	West Victoria	December 4
2	Lindsay, Town Hall	West Victoria	" 5
3	Fenelon Falls, Dickson's Hall	East Victoria	" 7
4	Bobcaygeon, Town Hall	East Victoria	" 8
5	Ennismore, Town Hall	West Peterboro	" 9
6	Lakefield, Town Hall	West Peterboro	" 10
7	Warsaw, Town Hall	East Peterboro	" 11
8	Keene, Town Hall	East Peterboro	" 12
9	Warkworth, Warkworth Hall	East Northumberland	" 14
10	Codrington, Orange Hall	East Northumberland	" 15
11	Menie, Lamb's Hall	East Northumberland	" 16
12	Wellman's Corners (afternoon)	North Hastings	" 17
13	Springbrook, Town Hall (evening)	North Hastings	" 17
14	Madoc, Town Hall	North Hastings	" 18
15	Tweed, Town Hall	East Hastings	" 19

REGULAR MEETINGS.—*Continued.*

DIVISION 9. J. N. Paget, Canboro, Dec. 4 to 18; A. G. McKenzie, Fairview, Dec. 4 to 18; Miss B. Millar, Guelph, Dec. 4; Miss L. Shuttleworth, Guelph, Dec. 15 to 17.

1	Emerald, Cheese Factory	Amherst Island	December	4
2	Stella, Town Hall	Amherst Island	"	5
3	Sunbury, Town Hall	Frontenac	"	7
4	Glenvale, Orange Hall	Frontenac	"	8
5	Odessa, Town Hall	Lennox	"	9
6	Napanee, Town Hall	Lennox	"	10
7	Enterprise, Merrill's	Addington	"	11
8	Tamworth, Town Hall	Addington	"	12
9	Deseronto, Town Hall	East Hastings	"	14
10	Wallbridge, Town Hall	West Hastings	"	15
11	Frankford, Curry's Hall	West Hastings	"	16
12	Grafton, Township Hall	West Northumberland	"	17
13	Harwood, Boyle's Hall	West Northumberland	"	18

DIVISION 10. W. C. Shearer, Bright, Nov. 30 to Dec. 7, Dec. 11 to 17; J. H. Esdon, Bainsville, Dec. 4 to 17; R. S. Hamer, Perth, Nov. 30 to Dec. 3; Miss G. Gray, 650 Bathurst street, Toronto, December 16, 17.

1	Middleville, Town Hall	North Lanark	November	30
2	Clayton, Public Hall	North Lanark	December	1
3	Perth, Town Hall	South Lanark	"	2
4	Drummond, Orange Hall	South Lanark	"	3
5	Merrickville, Town Hall	North Leeds	"	4
6	Oxford Mills, Town Hall	North Leeds	"	5
7	Williamsburg, Boyce's Hall	Dundas	"	7
8	Brinston's Corners, Cooper's Hall	Dundas	"	8
9	Spencerville, Town Hall	South Grenville	"	9
10	North Augusta, Masonic Hall	South Grenville	"	10
11	Caintown, Presbyterian Church Vestry	Brockville	"	11
12	Addison, Ashwoods	Brockville	"	12
13	Westport, Town Hall	South Leeds	"	14
14	Lansdowne, Town Hall	South Leeds	"	15
15	Parham, I.O.O.F. Hall	Centre Frontenac	"	16
16	Mt. Grove, Town Hall	Centre Frontenac	"	17

DIVISION 11. D. Z. Gibson, Willow Grove, Nov. 30 to Dec. 17; W. A. Munro, Morrisburg, Nov. 30 to Dec. 4; H. C. Emerson, Corbyville, Dec. 8 to Dec. 17; F. R. Mallory, Frankford, Nov. 30 to Dec. 7.

1	Crysler, Hall	Cornwall	November	30
2	Finch, Massey-Harris Hall	Cornwall	December	1
3	Avonmore, Beaver's Hall	Stormont	"	2
4	Monkland, McGilvery's Hall	Stormont	"	3
5	Moose Creek, Public Hall	Stormont	"	4
6	Martintown, St. Andrew's Hall	Glengarry	"	5
7	Maxville, Public Hall	Glengarry	"	7
8	Vankleek Hill, Town Hall	Prescott	"	8
9	Vars, Ganley's Hall	Russell	"	9
10	Kenmore	Russell	"	10
11	South March, Town Hall	Carleton	"	11
12	Fitzroy Harbour	Carleton	"	12
13	Northcote, Temperance Hall	South Renfrew	"	14
14	Grattan, School House	South Renfrew	"	15
15	Douglas, Temperance Hall	North Renfrew	"	16
16	Osceola, Town Hall	North Renfrew	"	17

DIVISION 12. C. W. Nash, Toronto, Dec. 5 to 19; H. Grose, Lefroy, Dec. 5 to 19.

1	Gravenhurst, Town Hall (afternoon)	South Muskoka	December	5
2	Alport, Schoolhouse (evening)	South Muskoka	"	5
3	Reay, Schoolhouse (afternoon)	South Muskoka	"	7
4	Germania, Schoolhouse (evening)	South Muskoka	"	7
5	Uffington, Crosier's Hall (afternoon)	South Muskoka	"	8

REGULAR MEETINGS.—*Continued.*

6	Purbrook, Schoolhouse (evening)	South Muskoka	December	8
7	Baysville, Town Hall (afternoon)	South Muskoka	"	9
8	Macaulay, Schoolhouse No. 2 (evening)	South Muskoka	"	9
9	Bardsville, Schoolhouse	South Muskoka	"	10
10	Brackenrig, Schoolhouse	Port Carling	"	11
11	Port Carling, Town Hall	Port Carling	"	12
12	Hurdville (afternoon)	West Parry Sound	"	14
13	Orrville (evening)	West Parry Sonnd	"	14
14	Carling	West Parry Sound	"	15
15	McDougal School (afternoon)	West Parry Sound	"	16
16	James Bay Junction (evening)	West Parry Sound	"	16
17	Parry Sound	West Parry Sound	"	17
18	Broadbent (afternoon)	West Parry Sound	"	18
19	McKellar (evening)	West Parry Sound	"	18
20	Dunchurch (afternoon)	West Parry Sound	"	19

SUPPLEMENTARY MEETINGS.

DIVISION 1. D. Anderson, Orillia, Feb. 3 to 24; Mr. Augustine, V.S., Aylmer, Feb. 20 to 24; Miss J. Rife, Hespeler, Feb. 3 to 11; Miss L. Shuttleworth, Guelph, Feb. 12 to 19.

1	Fordwich, Foresters' Hall	East Huron	February	3
2	Bluevale, Foresters' Hall	East Huron	"	4
3	Jamestown, Victoria Hall	East Huron	"	5
4	Molesworth, Orange Hall	East Huron	"	6
5	Ethel, Township Hall	East Huron	"	8
6	Walton, A.O.U.W. Hall	East Huron	"	9
7	Harlock, School House	East Huron	"	10
8	Winthrop, Calden Hall	East Huron	"	11
9	St. Columban, School House	East Huron	"	12
10	Londesborough, Brown's Hall	West Huron	"	13
11	Holmesville, Wilson's Hall	West Huron	"	15
12	Carlow, Township Hall	West Huron	"	16
13	St. Augustine, School	West Huron	"	17
14	Dungannon, Elliott's Hall	West Huron	"	18
15	St. Helen's, Mechanics' Institute Hall	West Huron	"	19
16	Bervie, I.O.O.F. Hall	Centre Bruce	"	20
17	Glamis, Methodist Hall	Centre Bruce	"	22
18	Paisley, Town Hall	Centre Bruce	"	23
19	Gillies' Hill, Township Hall	Centre Bruce	"	24

DIVISION 2. Geo. Carlow, Warkworth, Jan. 5 to Feb. 5; J. G. Cornell, Scarboro, Jan. 19 to 20; W. J. Lennox, Newton Robinson, Feb. 4 to 5; Mrs. C. Campbell, Windsor, Jan. 5 to 20.

1	Holland Centre, Town Hall	Centre Grey	January	5
2	Walter's Falls, A.O.U.W. Hall	Centre Grey	"	6
3	Temple Hill, Pres. Church Basement (aft.)	Centre Grey	"	7
4	Rocklyn (evening)	Centre Grey	"	7
5	Heathcote, Orange Hall	Centre Grey	"	8
6	Kimberley, Union Hall	Centre Grey	"	9
7	Flesherton, Town Hall	Centre Grey	"	11
8	Priceville, Watson's Hall	Centre Grey	"	12
9	Hopeville, Allan's Hall	Centre Grey	"	13
10	Dundalk, Town Hall	Centre Grey	"	14
11	Badjeros, School House	Centre Grey	"	15
12	Maxwell, Orange Hall	Centre Grey	"	16
13	Ravenna, Town Hall	Centre Grey	"	18
14	New Lowell, Town Hall	West Simcoe	"	19
15	Stayner, Stewart's Hall	West Simcoe	"	20
16	Midhurst, Patron's Hall	Centre Simcoe	"	21
17	Dalston	Centre Simcoe	"	22
18	Minesing, Workmen's Hall	Centre Simcoe	"	23
19	Edenvale, Knox Hall	Centre Simcoe	"	25

SUPPLEMENTARY MEETINGS.—*Continued.*

20	Phelpston, Murphy's Hall	Centre Simcoe	January	26
21	New Flos, School House	Centre Simcoe	"	27
22	Crossland, Knox Hall	Centre Simcoe	"	28
23	Wyevale, Orange Hall	Centre Simcoe	"	29
24	Wyebridge, Orange Hall	Centre Simcoe	"	30
25	LeFaivre's Cors., School House	Centre Simcoe	February	1
26	Lafontaine, Foresters' Hall	Centre Simcoe	"	2
27	Vasey, Ocange Hall	Centre Simcoe	"	3
28	Rugby, Temperance Hall	East Simcoe	"	4
29	Orillia, Council Ch. (morn. and aft.)	East Simcoe	"	5

DIVISION 3. J. Standish, V. S., Walkerton, Nov. 20 to Dec. 2; R. R. Elliott, Owen Sound, Nov. 20 to 23 and 28 to Dec. 7; Gavin Barbour, Crosshill, Dec. 3 to 7; Miss Yates, MacDonald Institute, Guelph, Nov. 20 to Dec. 7.

1	Lion's Head, Town Hall	North Bruce	November	20
2	Spry's School House	North Bruce	"	21
3	Mar, School House	North Bruce	"	23
4	Allenford, Orange Hall	West Bruce	"	24
5	Port Elgin, Town Hall	West Bruce	"	25
6	Underwood, Town Hall	West Bruce	"	26
7	Tiverton, Town Hall	West Bruce	"	27
8	Teeswater, Town Hall	South Bruce	"	28
9	Belmore, Foresters' Hall	South Bruce	"	30
10	Mildmay, Town Hall	South Bruce	December	1
11	Walkerton, Town Hall	South Bruce	"	2
12	Elmwood, Wildfang's Hall	South Grey and South Bruce	"	3
13	Ayton, Doersam's Hall	South Grey	"	4
14	Holstein, Agricultural Hall	South Grey	"	5
15	Dromore, Russell Hall	South Grey	"	7

DIVISION 4. Jno. Campbell, Woodville, Feb. 2 to 8; R. R. Elliott, Owen Sound, Feb. 9 to 22; H. Grose, Lefroy, Feb. 9 to 22; Miss G. Carter, Guelph, Feb. 2 to 8.

1	Komoka, Scoyne's Hall	North Middlesex	February	2
2	Lobo, Masonic Hall	North Middlesex	"	3
3	Mooresville, Maccabees' Hall	North Middlesex	"	4
4	West McGillivray, Town Hall	North Middlesex	"	5
5	Greenway, Wilson's Hall	North Middlesex	"	6
6	Sylvan, Maccabees' Hall	North Middlesex	"	8
7	Thedford, McKenzie's Hall	East Lambton	"	9
8	Camlachie, Bridge's Hall	East Lambton	"	10
9	Warwick, Orange Hall	East Lambton	"	11
10	Alvinston, Town Hall	East Lambton	"	12
11	Inwood, Orange Hall	East Lambton	"	13
12	Shetland, Peter's Hall	East Lambton	"	15
13	Oakdale, School House	West Lambton	"	16
14	Rutherford, Township Hall	West Lambton	"	17
15	Beecher, Foresters' Hall	West Lambton	"	18
16	Wilkesport, Mason Hall	West Lambton	"	19
17	Courtwright, Stewart's Hall	West Lambton	"	20
18	Sarnia, Town Hall (afternoon)	West Lambton	"	22
19	Bunyan, School House (evening)	West Lambton	"	22

DIVISION 5. H. G. Reed, V.S., Georgetown, Feb. 1 to 24; A. E. Calnan, Allisonville, Feb. 1 to 24; Miss S. Campbell, Brampton, Feb. 1 to 4, 15 to 18.

1	Harriston, Town Hall	Union	February	1
2	Clifford, Town Hall	Union	"	2
3	Drew, Temperance Hall	Union	"	3
4	Teviotdale, Foresters' Hall	Union	"	4
5	Gowanstown, Township Hall	North Perth	"	5
6	Carthage, Forester's Hall	North Perth	"	6
7	Milverton, Cook's Hall	North Perth	"	8
8	Monkton, Hall	North Perth	"	9
9	Rostock, Town Hall	North Perth	"	10

SUPPLEMENTARY MEETINGS.—*Continued.*

10	Stratford, Hall	North Perth	February	11
11	Shakespeare, Temperance Hall	North Perth	"	12 & 13
12	Tavistock, Opera House	South Perth	"	15
13	Sebringville, Foresters' Hall	South Perth	"	16
14	Fullarton, Township Hall	South Perth	"	17
15	Staffa, Town Hall	South Perth	"	18
16	Kirkton, Aberdeen Hall	South Perth	"	19
17	Farquhar, Brenner's Hall	South Huron	"	20
18	Strong's Hall, Tuckersmith Township	South Huron	"	22
19	Bayfield, Bayfield Hall	South Huron	"	23
20	Grand Bend	South Huron	"	24

DIVISION 6. R. S. Stevenson, Ancaster, Feb. 2 to 25; G. Barbour, Crosshill, Feb. 2 to 20; Jno. Buchanan, O.A.C., Guelph, Feb. 22 to 25.

1	Princeton, Town Hall	North Oxford	February	2
2	Drumbo, Town Hall	North Oxford	"	3
3	Innerkip, Foresters' Hall	North Oxford	"	4
4	Cassell, Cheese Factory	North Oxford	"	5
5	Braemar, Gospel Hall	North Oxford	"	6
6	Harrington	North Oxford	"	8
7	Embro, Town Hall	North Oxford	"	9
8	Thamesford, Foresters' Hall	North Oxford	"	10
9	The Grove, School House	East Middlesex	"	11
10	Thorndale, Hardings' Hall	East Middlesex	"	12
11	Wellburn, German's Hall	East Middlesex	"	13
12	Arva, Town Hall	East Middlesex	"	15
13	Lambeth, Foresters' Hall	East Middlesex	"	16
14	Glanworth, Hall	East Middlesex	"	17
15	Harrietsville, Foresters' Hall	East Middlesex	"	18
16	Dorchester Station	East Middlesex	"	19
17	Mt. Brydges, Town Hall	West Middlesex	"	20
18	Appin, Town Hall	West Middlesex	"	22
19	Wardsville, Town Hall	West Middlesex	"	23
20	Glencoe, Town Hall	West Middlesex	"	24
21	Walkers' School House	West Middlesex	"	25

DIVISION 7. W. F. Kydd, Simcoe; Feb. 2 to Mar. 6; A. E. Sherrington, Walkerton, Feb. 2 to 24; A. F. McKenny, Essex, Feb. 25 to Mar. 3; D. Rocheleau, Tecumseh, Mar. 4 to 6; Mrs. M. L. Ashley, Londesboro, Feb. 4 to 9.

1	Staffordville, Town Hall	East Elgin	February	2
2	Mount Salem, Royal Templars'	East Elgin	"	3
3	Sparta, Templar's Hall	East Elgin	"	4
4	Mapleton, School House	East Elgin	"	5
5	Middlemarch, Grange Hall	West Elgin	"	6
6	Dutton, Town Hall	West Elgin	"	8
7	Rodney, Whitton's Hall	West Elgin	"	9
8	Highgate, Township Hall	East Kent	"	10
9	Ridgetown, Town Hall	East Kent	"	11
10	Blenheim, Opera House	East Kent	"	12
11	Dresden, Town Hall	East Kent	"	13
12	Wabash, Town Hall	East Kent	"	15
13	Kent Bridge, Kent Bridge Hall	East Kent	"	16
14	Botany	East Kent	"	17
15	Thamesville, Town Hall	East Kent	"	18
16	Baldoon, Church Hall	West Kent	"	19
17	Irwin, Union Hall	West Kent	"	20
18	Merlin, School House	West Kent	"	22
19	Valetta, Township Hall	West Kent	"	23
20	Wheatley, Gibson's Hall	South Essex and West Kent	"	24 & 25
21	Leamington, Town Hall	South Essex	"	26
22	Harrow, Town Hall	South Essex	"	27
23	Amherstburg, Town Hall	South Essex	March	1
24	Essex, Town Hall	South Essex	"	2
25	Woodslee, St. Lawrence Hall	North Essex	"	3

SUPPLEMENTARY MEETINGS.—*Continued.*

26	Maidstone, C.M.B. Hall (afternoon)	North Essex	March	4
27	Sandwich, Town Hall (evening)	North Essex	"	4
28	Tecumseh, St. Jean's Hall (afternoon)	North Essex	"	5
29	Walkerville, School (evening)	North Essex	"	5
30	St. Joachim, Hall (afternoon)	North Essex	"	6
31	Bell River, Town Hall (evening	North Essex	"	6

DIVISION 8. Jno. Gardhouse, Highfield, Feb. 2 to 8; Anson Groh, Preston, Feb. 2 to 16; Geo. Carlaw, Warkworth, Feb. 9 to 26; J. G. Alexander, Mono Road, Feb. 27 to Mar. 6; H. Jones, Maitland, Feb. 17 to Mar. 6; Mrs. C. Campbell, Windsor, Feb. 9 to 16; Mrs. M. L. Ashley, Londesboro, Feb. 27 to Mar. 6.

1	Ohsweken, Council House	South Brant	February	2
2	Burtch, School House	South Brant	"	3
3	Scotland, Foster's Hall	South Brant	"	4
4	Hatchley, Baptist Church Basement	South Brant	"	5
5	Falkland, Hulbert Hall	South Brant	"	6
6	Cathcart, Foresters' Hall	South Brant	"	8
7	Caledonia, Association Hall	Haldimand	"	9
8	Canfield, McDonald's Hall	Haldimand	"	10
9	Clanbrassil, School House	Haldimand	"	11
10	Garnet, Hall	Haldimand	"	12
11	Cheapside	Haldimand	"	13
12	Rainham Centre	Haldimand	"	15
13	Nanticoke	Haldimand	"	16
14	Port Dover, Town Hall	South Norfolk	"	17
15	Walsh, Town Hall	South Norfolk	"	18
16	St. Williams, Town Hall	South Norfolk	"	19
17	Fairgrounds, Town Hall (afternoon only)	South Norfolk	"	20
18	Guysboro, Orange Hall	North Norfolk	"	22
19	Simcoe, Council Chamber	North Norfolk	"	23
20	Tyrrell, Tyrrell Hall	North Norfolk	"	24
21	Windham Centre, Town Hall	North Norfolk	"	25
22	Kelvin, Kelvin Hall	North Norfolk	"	26
23	Tillsonburg, Council Chamber	South Oxford	"	27
24	Brownsville, Town Hall	South Oxford	March	1
25	Springford, Town Hall	South Oxford	"	2
26	Burgessville, Oddfellows' Hall	South Oxford	"	3
27	Currie, A.O.U.W. Hall	South Oxford	"	4
28	Beachville, Town Hall	South Oxford	"	5
29	Folden, Folden's Hall	South Oxford	"	6

DIVISION 9. C. W. Nash, Toronto, Feb. 2 to Mar. 5; A. C. Hallman, Breslau, Feb. 2 to 8; J. W. Hyatt, West Lake, Feb. 9 to 17; D. Z. Gibson, Willow Grove, Feb. 18 to Mar. 5; Miss M. Yates, Guelph, Feb. 17 to 22, Feb. 26 to Mar. 5.

1	Jerseyville, McPherson's Hall	South Wentworth	February	2
2	Carluke, School House	South Wentworth	"	3
3	Glanford, Town Hall	South Wentworth	"	4
4	Hannon, School	South Wentworth	"	5
5	Binbrook, Temperance Hall	South Wentworth	"	6
6	Tapleytown, Old Church	South Wentworth	"	8
7	Winona, Institute Hall	South Wentworth	"	9
8	Grimsby, Society Hall	Lincoln	"	10
9	Beamsville, Town Hall	Lincoln	"	11
10	Jordan Sta., Maccabees' Hall	Lincoln	"	12
11	Grantham, Orange Hall	Lincoln	"	13
12	Virgil, Public Hall	Lincoln	"	15
13	Niagara Falls South, Town Hall	Welland	"	16
14	Willoughby, Town Hall	Welland	"	17
15	Stevensville, Johnson's Hall	Welland	"	18
16	Ridgeway, Town Hall	Welland	"	19
17	Welland Sta., School House	Welland	"	20
18	Allanburg, Township Hall	Welland	"	22
19	Brookfield, School House	Welland	"	23
20	Marshville, Town Hall	Monck	"	24
21	Attercliffe Sta., Cheese Factory	Monck	"	25

SUPPLEMENTARY MEETINGS.—*Continued.*

22	Wellandport, Misener's Hall	Monck	February	26
23	Smithsville, Brant's Hall	Monck	"	27
24	Shetfield, Township Hall	North Wentworth	March	1
25	Kirkwall, School House	North Wentworth	"	2
26	Westover, Maccabees' Hall	North Wentworth	"	3
27	Carlisle, Orange Hall	North Wentworth	"	4
28	Millgrove, Township Hall	North Wentworth	"	5

DIVISION 10. W. C. Shearer, Bright, Feb. 2 to Mar. 1; J. H. Esdon, Bainsville, Feb. 25 to Mar. 1; Miss G. Gray, Toronto, Feb. 2 to 6.

1	Wellesley, Opera House	North Waterloo	February	2
2	Linwood, Spahr's Hall	North Waterloo	"	3
3	Elmira, E. M. S. Hall	North Waterloo	"	4
4	St. Jacob's, Wideman's Hall	North Waterloo	"	5
5	Conestogo, Township Hall	North Waterloo	"	6
6	Bloomingdale, Township Hall	North Waterloo	"	8
7	Centreville, Township Hall	North Waterloo	"	9
8	Bridgeport, Hall	North Waterloo	"	10
9	Galt, Town Hall	South Waterloo	"	11
10	Breslau, Hall	South Waterloo	"	12
11	New Hamburg, Fell Hall	South Waterloo	"	13
12	Hespeler, Gray's Hall	South Waterloo	"	15
13	Ayr, McGeorge's Hall	South Waterloo	"	16
14	Roseville, School Room	South Waterloo	"	17
15	New Dundee, Chipman's Hall	South Waterloo	"	18
16	Mannheim, School Room	South Waterloo	"	19
17	Haysville, Village Hall	South Waterloo	"	20
18	Philipsburg, Hall	South Waterloo	"	22
19	Branchton, Foresters' Hall	South Waterloo	"	23
20	Preston, Council Room	South Waterloo	"	24
21	Glenmorris, Hall (afternoon)	North Brant	"	25
22	Mau's School House (evening)	North Brant	"	25
23	Moyle's School House (afternoon)	North Brant	"	26
24	White's School House (evening)	North Brant	"	26
25	Cainsville, Orange Hall	North Brant	"	27
26	Langford, School House (afternoon)	North Brant	March	1
27	Tuscarora, P.O. Middleport (evening)	North Brant	"	1

DIVISION 11. John Campbell, Woodville, Jan. 5 to Feb. 1; A. E. Sherrington, Walkerton, Jan. 5 to 20; Wm. Squirrell, O.A.C., Guelph, Jan. 29 to Feb. 5; R. R. Elliott, Owen Sound, Feb. 2 to 5; Miss B. Millar, Guelph, Jan. 9 to Feb. 1.

1	Moonstone, Township Hall	East Simcoe	January	5
2	Warminster, Town Hall	East Simcoe	"	6
3	Oro Station, School (afternoon)	East Simcoe	"	7
4	Shanty Bay, School (evening)	East Simcoe	"	7
5	Edgar, Temperance Hall	East Simcoe	"	8
6	Creemore, Leonard's Hall	West Simcoe	"	9
7	Duntroon, S. O. S. (evening)	West Simcoe	"	11
8	Singhampton, Grant's Hall	West Simcoe	"	12
9	Nottawa, Orange Hall	West Simcoe	"	13
10	Elm Grove, Orange Hall	South Simcoe	"	14
11	Tottenham	South Simcoe	"	15
12	Scotch Settlement	South Simcoe	"	16
13	Churchill, Orange Hall	South Simcoe	"	18
14	Stroud, Orange Hall	South Simcoe	"	19
15	Ivy	South Simcoe	"	20
16	Erin, Town Hall	Centre Wellington	"	21
17	Hillsburgh, Town Hall	Centre Wellington	"	22
18	Marsville, Anthony's Hall	Centre Wellington	"	23
19	Orton, Town Hall	Centre Wellington	"	25
20	Belwood, Town Hall	Centre Wellington	"	26
21	Ennottville, Mechanics' Hall	Centre Wellington	"	27
22	Connock, School House	Centre Wellington	"	28
23	Alma, Town Hall	West Wellington	"	29
24	Rothsay, Temperance Hall	West Wellington	"	30

SUPPLEMENTARY MEETINGS.—*Continued.*

25	Palmerston, Town Hall	West Wellington	February	1
26	Mt. Forest, Allan's Hall	East Wellington	"	2
27	Kenilworth, Township Hall	East Wellington	"	3
28	Conn, Orange Hall (afternoon)	East Wellington	"	4
29	Conn, School House (evening)	East Wellington	"	4
30	Cedarville, Orange Hall	East Wellington	"	5

DIVISION 12. D. Z. Gibson, Willow Grove, Jan. 5 to Feb. 15; A. E. Calnan, Allisonville, Jan. 5 to 13; H. C. Emerson, Corbyville, Feb. 1 to 15; Miss L. Shuttleworth, Guelph, Jan. 14 to Feb. 4.

1	Jessopville, Church Hall, (afternoon)	Dufferin	January	5
2	Keldon, Church Hall, (evening)	Dufferin	"	5
3	Riverview, School House, (afternoon)	Dufferin	"	6
4	Corbetton, Church Hall, (evening)	Dufferin	"	6
5	Honeywood, C. F. Hall	Dufferin	"	7
6	Horning's Mills, Workmen's Hall	Dufferin	"	8
7	Perm, Orange Hall	Dufferin	"	9
8	Violet Hill, Orange Hall, (afternoon)	Dufferin	"	11
9	Rosemount, Hannal's Hall, (evening)	Dufferin	"	11
10	Relessy, Orange Hall, (afternoon)	Dufferin	"	12
11	Mono Centre, Council Ch., (evening)	Dufferin	"	12
12	Laurel, Township Hall	Dufferin	"	13
13	Churchville	Peel	"	14
14	Brampton, Times Hall	Peel	"	15
15	Inglewood, Town Hall	Peel	"	16
16	Alton, Science Hall	Peel	"	18
17	Bolton, Town Hall	Peel	"	19
18	Castlemore, Town Hall	Peel	"	20
19	Sand Hill, Town Hall	Peel	"	21
20	Elmbank, Temperance Hall	Peel	"	22
21	Kleinburg, Temperance Hall	West York	"	23
22	Maple, Masonic Hall	West York	"	25
23	Elia, Foresters' Hall	West York	"	26
24	Islington, Township Hall	West York	"	27
25	Victoria Sq., Public Hall	East York	"	28
26	Thornhill, Victoria Hall	East York	"	29
27	Highland Creek	East York	"	30
28	Wexford, Methodist Church	East York	February	1
29	Malvern	East York	"	2
30	Box Grove, Foresters' Hall	East York	"	3
31	Sutton West, Village Hall	North York	"	4
32	Mount Albert, Town Hall	North York	"	5
33	Ballantrae, Village Hall	North York	"	6
34	Vandorf, Mechanic Hall	North York	"	8
35	Kettleby, Temperance Hall	North York	"	9
36	Queensville, Presbyterian Church	North York	"	10
37	Newmarket, Temperance Hall	North York	"	11
38	King City, Crossley's Hall	North York	"	12
39	Nobleton, Music Hall	North York	"	13
40	Thistleton, Hall	North York	"	15

DIVISION 13. Gavin Barbour, Crosshill, Jan. 6 to 30; J. H. Hare, Whitby, Jan. 5 to 13; A. G. McKenzie, Fairview, Jan. 14 to 30; Miss B. Duncan, Emery, Jan. 14 to 16, 20, 21.

1	Altona, School House	North Ontario	January	5
2	Goodwood	North Ontario	"	6
3	Uxbridge, Town Hall	North Ontario	"	7
4	Sandford, Village Hall	North Ontario	"	8
5	Zephyr, Public Hall	North Ontario	"	9
6	Cannington, Village Hall	North Ontario	"	11
7	Beaverton, Alexander's Hall	North Ontario	"	12
8	Brechin, McGrath's Hall, (afternoon)	North Ontario	"	13
9	Udney, Orange Hall, (evening)	North Ontario	"	13
10	Oakwood, Township Hall	West Victoria	"	14
11	Little Britain, Temperance Hall	West Victoria	"	15
12	Valentia, Foresters' Hall	West Victoria	"	16

SUPPLEMENTARY MEETINGS.—*Continued.*

13	Dunsford, Old Church	East Victoria	January	18
14	Cameron, Orange Hall	East Victoria	"	19
15	Burnt River, Orange Hall	East Victoria	"	20
16	Omemee, Opera House	East Victoria	"	21
17	Bethany, Town Hall, (afternoon)	East Durham	"	22
18	Manvers' Station, (evening)	East Durham	"	22
19	Millbrook, Town Hall, (afternoon)	East Durham	"	23
20	Cavanville, Old Church, (evening)	East Durham	"	23
21	Elizabethville, (afternoon)	East Durham	"	25
22	Garden Hill, Orange Hall, (evening)	East Durham	"	25
23	Zion, S. S. Hall, (afternoon)	East Durham	"	26
24	Canton, Sons of England Hall, (evening)	East Durham	"	26
25	Newtonville, S. O. T. Hall, (afternoon)	West Durham	"	27
26	Newcastle, Town Hall, (evening)	West Durham	"	27
27	Orono, Town Hall	West Durham	"	28
28	Solina, Temperance Hall	West Durham	"	29
29	Nestleton, Foresters' Hall	West Durham	"	30

Division 14. C. F. Alward, Havelock, N. B., Jan. 5 to 29; E. W. Kitchen, Lovering, Jan. 5 to 11; R. M. Winslow, Picton, Jan. 12 to 20; D. Johnson, Forest, Jan. 21 to 29; Miss G. Grey, Toronto, Jan. 11, 13, 21 to 25.

1	Stewarts, Union Hall	West Peterboro	January	5
2	4th Line Smith, Orange Hall	West Peterboro	"	6
3	Peterboro, Council Chamber, (afternoon)	West Peterboro	"	7
4	North Monaghan, Town Hall, (evening)	West Peterboro	"	7
5	Havelock, Town Hall,	East Peterboro	"	8
6	Norwood, Town Hall	East Peterboro	"	9
7	Westwood, Township Hall	East Peterboro	"	11
8	Hillier, Town Hall, (afternoon)	Prince Edward	"	12
9	Wellington, Town Hall, (evening)	Prince Edward	"	12
10	Bloomfield Town Hall	Prince Edward	"	13
11	West Lake, School House	Prince Edward	"	14
12	Demorestville, Town Hall	Prince Edward	"	15
13	Cressy, Town Hall, (afternoon)	Prince Edward	"	16
14	Waupoos, Town Hall, (evening)	Prince Edward	"	16
15	Milford, Town Hall	Prince Edward	"	18
16	Cherry Valley	Prince Edward	"	19
17	Ameliasburg, Town Hall	Prince Edward	"	20
18	Wooler, Town Hall	East Northumberland	"	21
19	Brighton, Town Hall	East Northumberland	"	22
20	Colborne, Temperance Hall	East Northumberland	"	23
21	Castleton, Town Hall	East Northumberland	"	25
22	Roseneath, Township Hall	West Northumberland	"	26
23	Baltimore, Chapman's Hall	West Northumberland	"	27
24	Coldsprings, Township Hall	West Northumberland	"	28
25	Elmview, School House	West Northumberland	"	29

Division 15. Harold Jones, Maitland, Jan. 5 to Feb. 12; J. H. Esdon, Bainsville, Jan. 5 to Feb. 12; Miss G. Gray, Toronto, Jan. 27 to 30.

1	Adolphustown, Town Hall	Lennox	January	5
2	Sillsville, Town Hall	Lennox	"	6
3	Bath, Town Hall	Lennox	"	7
4	Wilton, Grange Hall	Lennox	"	8
5	Newburgh, Finkle's Hall	Addington	"	9
6	Centreville, Town Hall	Addington	"	11
7	Bogart, School House	East Hastings	"	12
8	Thomasburg, C. O. O. F. Hall	East Hastings	"	13
9	Queensboro, Orange Hall	North Hastings	"	14
10	Allen Settlement (afternoon)	North Hastings	"	15
11	Eldorado, Town Hall (evg.)	North Hastings	"	15
12	Delora (afternoon)	North Hastings	"	16
13	Marmora, Town Hall (evg.)	North Hastings	"	16
14	Ivanhoe, Orange Hall	North Hastings	"	18
15	Moira, Town Hall	North Hastings	"	19
16	Stirling, Foresters' Hall	North Hastings	"	20
17	Turner's School House	West Hastings	"	21
18	Gilbert's School House	West Hastings	"	22
19	Johnstown, School House	West Hastings	"	23
10	Bayside, School House	West Hastings	"	25

SUPPLEMENTARY MEETINGS.—*Continued.*

21	Hoyles' School House	West Hastings	January	26
22	Foxboro, School House	East Hastings	"	27
23	Plainfield, Orange Hall	East Hastings	"	28
24	Melrose, Town Hall	East Hastings	"	29
25	Clazies' School House	East Hastings	"	30
26	Dufferin	Frontenac	February	1
27	Cataraqui	Frontenac	"	2
28	Glenburnie, School House	Frontenac	"	3
29	Sydenham, Township Hall	Frontenac	"	4
30	Piccadilly, Town Hall	Centre Frontenac	"	5
31	Sharbot Lake, Town Hall	Centre Frontenac	"	6
32	Gananoque, Town Hall	South Leeds	"	8
33	Escott, Springfield, Town Hall	South Leeds	"	9
34	Delta, Town Hall	South Leeds	"	10
35	Newboro, Town Hall	South Leeds	"	11
36	Seeley's Bay, Sebet Knight's Hall	South Leeds	"	12

DIVISION 16. R. S. Stevenson, Ancaster, Jan. 5 to Feb. 2; W. Munro, Morrisburg, Jan. 5, 22 to 23; W. J. Kerr, Ottawa, Jan. 6 to 21; D. Rocheleau, Jan. 25 to Feb. 2.

1	Aultsville, Public Hall	Stormont	January	5
2	Osnabruck Centre, Township Hall	Stormont	"	6
3	Newington, Stormont Hall	Stormont	"	7
4	Northfield, Arbuthnot's Hall	Cornwall	"	8
5	Cornwall Centre, Township Hall	Cornwall	"	9
6	South Branch, Patron's Hall	Cornwall	"	11
7	Mallorytown, Oddfellows' Hall	Brockville	"	12
8	Lyn, School House	Brockville	"	13
9	New Dublin, Township Hall	Brockville	"	14
10	Maitland, Methodist Church	South Grenville	"	15
11	Maynard, Church Basement	South Grenville	"	16
12	Roebuck, School House	South Grenville	"	18
13	Ventnor, School House	South Grenville	"	19
14	Shanley, Workmen's Hall	South Grenville	"	20
15	Brouseville, School House	South Grenville	"	21
16	Mountain	Dundas	"	22
17	Chesterville, Town Hall	Dundas	"	23
18	Greenfield, Township Hall	Glengarry	"	25
19	Iniglies, Township Hall	Glengarry	"	26
20	Bainsville, Sangster & McQuaig's Hall	Glengarry	"	27
21	St. Eugene, Town Hall	Prescott	"	28
22	Pendleton, Township Hall	Prescott	"	29
23	Clarence Creek, Town Hall	Russell	"	30
24	Casselman, Town Hall	Russell	February	1
25	Hawthorne, Orange Hall	Russell	"	2

DIVISION 17. J. N. Paget, Canboro, Jan. 5 to 30; H. Grose, Lefroy, Jan. 5 to 30.

1	Merrivale, School House	Carleton	January	5
2	Manotick, Harmony Hall	Carleton	"	6
3	North Gower	Carleton	"	7
4	Richmond, Town Hall	Carleton	"	8
5	Ashton, Public Hall	Carleton	"	9
6	Elphin, Public Hall	North Lanark	"	11
7	McDonald's Corners, Agricultural Hall	North Lanark	"	12
8	Watson's Corners, Temperance Hall	North Lanark	"	13
9	Lanark, Town Hall	North Lanark	"	14
10	McLean's School House	South Lanark	"	15
11	Richardson's School	South Lanark	"	16
12	Bathurst, Town Hall	South Lanark	"	18
13	Maberly, Town Hall	South Lanark	"	19
14	Toledo, Town Hall	North Leeds and Grenville	"	20
15	Easton's Corners, Town Hall	North Leeds and Grenville	"	21
16	Bishop's Mills, Temperance Hall	North Leeds and Grenville	"	22
17	Heckston, School House	North Leeds and Grenville	"	23
18	Burritt's Rapids, Victoria Hall	North Leeds and Grenville	"	25
19	Glasgow, Davis Hall	South Renfrew	"	26
20	Renfrew, Temperance Hall	South Renfrew	"	27
21	Admaston, Temperance Hall	South Renfrew	"	28
22	Alice, Presbyterian Church	North Renfrew	"	29
23	Greenwood, Temperance Hall	North Renfrew	"	30

SPEAKERS AND SUBJECTS.

ALEXANDER, J. G., V.S., Mono Road.— Dr. Alexander's experience as a practising veterinary in one of the progressive farming districts of the Province, places him in a position to give valuable instruction upon the subjects announced herewith.

Subjects: "Breeding of Heavy Horses," "Common Ailments and Emergency Treatment," "The Brood Mare and Her Foal," "Breeding and Care of Farm Animals," "Diseases of Farm Animals and their Treatment," "Examining Horses for Soundness."

ALWARD, C. F., Havelock, N.B.—Mr. Alward is one of the leading dairymen of New Brunswick and has already rendered most acceptable services at Institute meetings in some of the dairy districts of Ontario. He is thoroughly practical and gives instruction in a forceful and convincing manner.

Subjects: "Summer and Winter Care of Dairy Cows," "Pork Production," "Raising Calves for Dairy Purposes," "Soil Cultivation and Moisture," "Co-operative Dairying," "Seed Selection."

ANDERSON, DUNCAN C., Orillia.—Mr. Anderson is a native born Scotchman, and after having cleared the farm upon which he spent most of his days in Simcoe County, he devoted his attention to putting the same in first class condition. Mr. Anderson's services have been largely sought after for agricultural instruction work, not only in Ontario but in the other provinces of the Dominion, so much so that he is now devoting nearly all his time to this work. He is a man of wide experience and a first class judge of the classes of stock indicated in his list of subjects. Mr. Anderson has recently devoted considerable attention to stable ventilation, also to the beautifying of home surroundings and household conveniences, and his talks upon the same should prove of great value.

Subjects: "Soil Cultivation and Rotation of Crops," "Clover as a Fertilizer," "Manure—Its Care and Application," "Cattle Raising," "The Breeding of Heavy Horses," "Hog Breeding and Feeding," "Stable Ventilation." Evening: "Household Conveniences and Beautiful Surroundings," "Farming as an Occupation."

BARBOUR, GAVIN, Crosshill.—Mr. Barbour has now had three years' experience as an Institute worker, and his services should prove of great benefit to the districts in which the production of beef and the cultivation of the soil are of importance. Mr. Barbour is a representative of a large number of farmers who have succeeded by hard labour and a thorough knowledge of the lines of farming followed, in increasing the productivity of the farm and making many improvements, while at the same time paying off obligations.

Mr. Barbour is particularly well qualified to give practical demonstrations in the judging of beef cattle, having given some little attention to this work for the benefit of his neighbors. The young farmers especially, should benefit from Mr. Barbour's addresses.

Subjects: "The Beefsteak Steer," "Draft Horses and How to Raise Them," "Corn Growing," "Cultivation and Manures," "Farmers and Their Sons."

BECKETT, H. L., Hamilton.—Mr. Beckett is the son of a prosperous farmer in the vicinity of Hamilton. He spent his early years on the farm, and subsequently took a full course at the Ontario Agricultural College, graduating in 1893. Mr. Beckett has successfully managed the homestead,

devoting a good deal of attention to the dairy industry. He had charge of one of the travelling dairies which toured the Province some years ago, and gave general satisfaction in conducting this educational campaign. He has already had extended experience in Institute work, and is quite at home in it. Mr. Beckett will be available for occasional meetings this winter.

Subjects: "Farmyard Manure; its Management and Application," "Improving our Dairy Herds," "Feeding for Milk." Evening: "Farming as an Occupation."

CALNAN, A. E., Allisonville.—Mr. Calnan is a practical farmer of Prince Edward County, and has had 15 years' experience along the line of cheese factory work, having been President, Vice-President and Secretary-Treasurer of one of the leading factories in Prince Edward County, which has become so famous for its high quality of cheese. It will be seen from Mr. Calnan's subjects that he is prepared to talk upon general farming, and his wide experience and success are reflected in the instruction given.

Subjects: "The Building-up and Maintenance of the Dairy Herd," "The Raising of Fodder for Dairy Cattle," "Co-operative Cheese Making from the Producers' and Manufacturers' Standpoints," "Improvement of Crops by Seed Selection." Evening: "The Dairying Industry," "Our Canadian Heritage."

CAMPBELL, A. M., Maxville.—Mr. Campbell is one of the successful dairymen of Eastern Ontario and his practical experience and ability to give information in a clear and forceful manner render his a valuable acquisition to the Institute staff.

Subjects: "Care and Feeding of the Dairy Cow," "The Breeding of Dairy Cattle," "Cultivation of Corn, and the Silo," "The Bright Side of Farm Life," "Farm Management."

CAMPBELL, JNO., Woodville.— It is not necessary to more than mention that the John Campbell referred to is the well known sheep breeder who has been so successful, not only at Exhibitions in Canada, but also at the leading shows on the other side of the line. Mr. Campbell's specialty is sheep raising, and he is also considered one of the best authorities on general farming, and the production of beef.

Mr. Campbell was awarded a gold medal for the best farm in nine counties, some years ago. He has acted as judge in the Field Crop Competitions which are being held from year to year under the direction of the Agricultural Societies.

Subjects: "Growing Lambs for Profit," "The Butcher's Bullock, from Breeding to Block," "The Bacon Trade," "Importance of Using good Selections of Seed Grain," "How to Double the Production and Income of the Average Farm," "Tile Draining." Evening: "Ontario—Our Duty in Maintaining its Reputation," "Farming as a Business."

CARLAW, GEO., Warkworth.—Mr. Carlaw is a good, practical farmer in Northumberland County. He attended the Ontario Agricultural College in his earlier years, and since then has been putting into practice on his farm the knowledge acquired in that Institution. He is a practical dairyman, having served his time in the home dairy, and in the factory. Mr. Carlaw is also familiar with the practical work of the Farmers' Institute, having been secretary of his own local Institute for many years. Mr. Carlaw has had several years' experience in Ontario Institutes, both as lecturer and officer, and has also been engaged at Institute work in Quebec.

Subjects: "Selection and Feeding of the Dairy Herd," "Eradication of Weeds," "Corn Growing for the Silo," "The Farm Dairy." Evening: "Agricultural Education," "Cultivation of the Soil."

CLARK, J. W., Cainsville.—Mr. Clark is one of the largest breeders and feeders of poultry in the Province. He is a strong advocate of utility breeds for the farmer and approves of fattening chickens in crates. That he knows how to select the proper type for the best results is shown by the large number of prizes he has won on dressed poultry at the Winter Fair Guelph. These prizes include the sweepstakes for the best pair in show. Mr. Clark is also a breeder of pure-bred hogs of the bacon type, has had several years' experience in growing alfalfa, and has also a large apiary. Mr. Clark has given considerable attention to the production of good seed and methods of identification and eradication of weeds.

Mr. Clark has been engaged for special work in poultry lines in New York State during December, January and February, and will be able to devote only a limited time to Ontario work this year.

Subjects: "The Importance of Seed Selection," "Noxious Weeds and Best Methods of Eradication," "Growing Alfalfa," "Feeding Hogs, Bacon Type vs. Short Fat," Manure; Its Care and Application," "Improvements of our Public Roads." Evening: "Poultry; Selecting, Breeding, Hatching, Rearing, Fattening," "Farmers' Poultry Houses and Fixtures," "The Incubator; Eggs in Winter," "Care of the Honey Bee."

CORNELL, J. G., Scarboro.—Mr. Cornell has had the advantage of instruction at the Agricultural College, Guelph, as well as a number of years' practical experience in successfully managing his own farm, which has been devoted largely to the production of milk.

Subjects: "Production of Milk for City Trade," "The Production and Feeding of Silage," "Cultivation and Rotation," "Improvement in Rural Conditions."

DRURY, E. C., Crown Hill.—Mr. Drury is an honor graduate of the O. A. C. and works successfully 150 acres, the farm upon which his father and grandfather lived. He is a fluent, forcible and convincing speaker, and is well prepared to discuss the subjects for which he is announced. Mr. Drury is a good judge of live stock, and a recognized authority on soil cultivation.

Subjects: "Rotation of Crops, Including Cultivation," "Weeds, and How to Combat them," "Soil Moisture and Its Control," "The Farmer's Flock of Sheep," "The Breeding and Feeding of Beef Animals," "The Dual Purpose Cow." Evening: "The Social Side of Farming."

ECHLIN, J. H., Balderson.— Mr. Echlin has had extended experience in dairying so far as the making side of the problem is concerned. He has been one of the regular dairy syndicate instructors during the summer season, for several years, and has also been one of the Dairy School Instructors at Kingston. From his wide experience in inspecting factories as well as the farms of the patrons, Mr. Echlin's services should prove most valuable in the dairy sections which he may visit.

Subjects: "Sanitary Requirements of Cheese Factories," "Care of Milk for Cheese Factories," "Some of the Chief Requirements to Perfect the Cheese Products," "Duties of Patrons, Proprietors and Manufacturers."

ELLIOTT, R. R., Owen Sound.—Mr. Elliott took a two years' course at the Agricultural College, and spent some years as herdsman at the Dominion Experimental Farm,* but is now operating a farm of his own. His work in the service of the Dominion Department of Agriculture, and his practical experience upon his own farm renders him a valuable acquisition to the Institute staff.

*Mr. Elliott was manager of a large farm in New York State for several years.

Subjects: "The Bacon Hog," "Breeding, Feeding and Selection of Dairy Cows," "Stable Management and Common Ailments of Cattle," "Soil Cultivation," "Beautifying Home Surroundings."

Elliott, Wm., Galt.—Mr. William Elliott is the son of Andrew Elliott, He attended the O.A C., Guelph, and since graduation has been putting into practice the knowledge there gained. He has followed in his father's steps as a breeder of dairy cattle and bacon hogs, and has been a conspicuous prize winner at our large fairs. He is thoroughly practical and up-to-date in his methods of farming. Mr. Elliott's farming operation are so extensive that he is able to devote only a very limited amount of time to Institute work.

Subjects: "The Cultivation of Our Farms," "The Care and Breeding of Dairy Cows," "The Bacon Hog, Breeding and Feeding." Evening: "Things We Ought to Think About."

Emerson, H. C., Corbyville.—Mr. Emerson has had experience as secretary of his local Institute, and has also done more or less Institute work as a regular delegate in different sections of the Province. He has succeeded in enriching the soil of his own farm and destroying the weeds thereon, and ha still had profitable use of his land each season. His cows, in 1907, averaged six thousand pounds during the cheese factory period.

Subjects: "Judging and Breeding the Dairy Cow," "Selecting and Care of the Brood Sow and Young Pigs," "A Practical Talk on Corn," "The Farmer's Interest in Good Seeds." Evening: "The Land We Live in."

Esdon, Jas. H., Bainsville.—Mr. Esdon has been for many years farming in Glengarry County, a county noted for its many dairy farms. He should prove a practical speaker, as he can discuss from experience the subjects for which he is announced.

Subjects: "Heavy Horses, their Breeding and Care," "Treatment of the Dairy Cow," "Swine Breeding and Dairy Production," "Poultry for Profit," "Care of the Calf intended for Dairy Purposes," "Rotation of Crops," "Destruction of Weeds."

Foster, J. G., Myrtle Station.—Mr. Foster is a practical farmer, and makes a specialty of dairying. Mr. Foster was secretary of North Hastings Farmers' Institute for several years. His success in this office renders his services of special benefit to Institute officers in their local work.

Subjects: "Crop Rotation," "The Bacon Hog," "The Dairy Cow," "Our Fodder Crops." Evening: "The Land We Live in."

Fraser, W. S., Bradford.—Mr. Fraser is one of the pioneer Institute workers of Ontario. In the early days when Institute work was in its infancy he attended the meetings as the "practical" man, on deputations composed largely of college professors. He is a thoroughly practical farmer. He is well acquainted with most of the farm problems, and, having been over the entire Province of Ontario as well as in most of the other Provinces on Institute work, has become a valuable worker. Mr. Fraser obtained a silver medal from the Agricultural and Arts Association for the appearance of his farm some years ago.

Subjects: "Noxious Weeds, and How to Combat Them," "Improvement of Seed," "How to Obtain Clovers, and Their Value," "Sheep: Breeding and Management," "Soil Cultivation and Conservation of Moisture," "Underdraining," "Feeds and Feeding." Evening: "Twentieth Century Agriculture," "Eastern and Western Canada."

Gardhouse, John, Highfield.—Mr. Gardhouse is a well-known breeder of Shorthorn cattle and long-wool sheep. All of the prize lists of our large fairs testify to his ability to raise high-class stock. He raises most of the food for his pure-bred stock, and is prepared to tell how he cultivates his

land, plants his crops and mixes his foods so as to secure the best results from his live stock. Mr. Gardhouse will be found of special value to those Institutes where the officers wish to have practical work on heavy horses, beef cattle, or sheep.

Subjects: "Horse Breeding for Profit," "Care and Management of Horses," "How to Select and Feed Beef Cattle," "Care and Management of Sheep." "Raising Feed for Live Stock." Evening: "How to Improve Present Farm Conditions," "How to Interest the Young People in the Farm."

Gibson, D. Z., B.S.A., Willow Grove, Ont.—Mr. Gibson came from one of the good farms in Monck County, when quite a young man. He took a most creditable standing in his course at the O.A.C., receiving his B.S.A. degree, after which he returned to the farm where he has made common sense application of scientific information in his farming operations. Mr. Gibson has gradually improved his farm and at the same time has made considerable profit. His specialties are growing fall wheat and alfalfa and the production of sheep. He has had 4 years' experience in Institute work and has been a councillor and reeve in his own township for several years. He is also vice-president of the Caledonia Fair—one of the best one-day fairs in the Province. Mr. Gibson is an impressive speaker and a natural teacher.

Subjects: "Growing Fall Wheat," "Sheep Raising," "Alfalfa," "Potato Culture," "Humus and Moisture in the Soil." Evening: "Cultivation of the Mind," "Managing a Farm."

Glendinning, Henry, Manilla.—Mr. Glendinning, besides breeding and feeding dairy cattle, has made a reputation as a producer of field seeds. For years he has studied the weed question, and has practically succeeded in eradicating the weed seeds from his fields and has been able to produce a quantity of seed almost free from impurities. With his seed charts, and talks on cultivation of the soil and rotation of crops, he has helped many farmers in Ontario to improve their methods of farming, and to increase their profits. Mr. Glendinning is a most successful dairy farmer, and a director of the Eastern Dairymen's Association. He has made a marked success of growing alfalfa.

Subjects: "Feeds and Feeding," "Growing Clover and How to Save It," "Growing Red and Alsike Clover for Seed," "The Dairy Cow," "The Farm Water Supply," "Cultivation of Soil, and Destruction of Weeds." Evening: "Beautifying the Farm Home," "Farm Conveniences."

Groh, Anson, Preston.—Mr. Groh has demonstrated how a very ordinary farm can be made a money-maker to its owner at the same time that the fertility is being increased and improvements paid for. Mr. Groh has given close attention to farm forestry, a subject of importance to Ontario farmers. He has nine years' continuous daily milk records of his herd. His experience in building silos, stables, walls and tanks with cement, and in the use of gasoline engines, renders his instruction on these lines of special value to farmers.

Subjects: "Fall Wheat," "Sheep," "Lucerne," "Potatoes," "Humus in the soil." Evening: "Three generations in Waterloo County."

Grose, Henry, Lefroy.—Mr. Grose is the owner of a first-class farm in Simcoe County, and has been eminently successful in general farming. He has the happy faculty of presenting hard facts in a pleasing manner, and his address to boys on the farm is very instructive and uplifting. Mr. Grose has attended Institute meetings for two seasons with acceptance, and his services should be of special value in those sections where mixed farming is followed.

Subjects: "How to Increase and Maintain the Fertility of the Soil," "Selection of Seed," "Home Dairy Work," "The Growing of Clover." Evening: "Making Farm Life Attractive for the Boy," "Benefits of Institute Work."

HALLMAN, A. C., Breslan.—Mr. Hallman was born and raised on a farm, and has been farming for himself for over 20 years with great success, having built up an impoverished farm. He is a well known breeder and feeder of dairy cattle, and for years has been a prize winner for hogs at some of our leading exhibitions. He has also judged at many of our fairs, including Toronto Industrial, hence his talk on the improvement of live stock has been well received by many farmers.

Subjects: "How to Improve Our Live Stock; Their Care and Feeding," "The Bacon Hog and Export Trade," "Cultivation of Corn and the Silo," "Growing Sugar Beets for the Factory," "Home Dairying," "Noxious Weeds." Evening: "The Farmer's Fruit Garden," "Poultry on the Farm."

HILBORN, J. L., Leamington.—For a long time the name of Mr. Hilborn has been familiar as one of the leading fruit-growers in Lambton County. He owns a splendid fruit farm on the north shore of Lake Erie, which bears every evidence of thrift and prosperity. His buildings are neatly painted, and no weeds are allowed to grow to the detriment of the crops. A 6,000 gallon tank holds water which is used for irrigation.

Subjects: "Growing Early Vegetables for Commercial Purposes," "Best Methods for Successful Peach Growing," "Cement for Building Purposes," "The Farmer's Fruit and Vegetable Garden," "How to make Apple-growing Profitable." Evening: "Getting Pleasure and Profit Out of Farm Life."

HUME, ALEX., Menie.—Mr. Hume is a noted Ayrshire breeder in the County of Northumberland. He is also a noted prize winner at our fall fairs, and as he is well prepared to discuss the dairy herd from all standpoints his services will be appreciated.

Subjects: "Building Up a Dairy Herd—Breeding and Selecting, Feeding and Care," "Stable Construction and Water Supply," "Growing of Suitable Crops for Dairy Herd," "The Bacon Hog," "Rotation of Crops, and Application of Manure." Evening: "Advantages of Farm Life."

HYATT, J. W., West Lake.—Mr. Hyatt has done much for the advancement of agriculture in his district, devoting much attention to the improvement of farm crops and the building up of the dairy herd. He has made a study of the growing of crops for canning purposes and has been one of the moving spirits in the establishment of a local co-operative canning factory. Mr. Hyatt has had considerable experience in public speaking and has the faculty of imparting his information in an attractive and forceful manner.

Subjects: "The Building up of the Dairy Herd," "Soiling Crops for Farm Animals," "The Market End of Farming," "The Selection of Seed," "Destruction of Weeds and General Cultivation," "A Well Kept Farm and its Influence upon Home Life," "Beneficial Effects of Living Close to Nature."

JAMES, D., Langstaff.—Mr. James took possession of the form on which he now resides some thirty-four years ago, and has succeeded in converting it from a bed of weeds and rubbish into a clean, systematic and well-equipped farm. He is a believer in general farming, as will be seen from his list of subjects. Some thirty years ago Mr. James and his neighbors formed an association and held weekly meetings throughout the winter. At that time he began the collection of a library, and to-day has one of the best equipped agricultural libraries to be found among practical farmers.

Subjects: "Destruction of Weeds," "Home Dairying," "Growing and Curing Alfalfa," "Corn for Ensilage," "The Farmer's Wood Lot." Evening: "Some Mistakes Made by Farmers," "Hits and Misses."

Jones, Harold, Maitland.—For a long time it was thought that the St. Lawrence Valley would never become a fruit-growing district. Mr. Jones, however, has demonstrated to the contrary. He is one of the men who has made the apple, known as the "McIntosh Red," famous throughout the world. On his farm is located one of the Provincial Fruit Experiment Stations, and through this Mr. Jones has for years demonstrated to the farmers throughout the Valley the benefits to be derived from clean cultivation, proper fertilizing, and persistent spraying. As the result of careful spraying Mr. Jones has raised large crops of fine potatoes, while those of his neighbors were ruined by rot.

Subjects: "How to Manage Our Fruit Orchards; Planting, Cultivating, Fertilizing, Harvesting, Packing, etc.," "Life History of Some of Our Troublesome Insects," "Spraying, and Why We Do It," "Potato Culture and Treatment for Blight and Rot." Evening: "The Balance of Nature, Bird Life and Insect World."

Johnson, D., Forest.—Mr. Johnson is a successful grower and shipper of apples and other large fruits and has a good practical knowledge of all lines of farming. He is specially interested in the co-operative production and marketing of fruit which has been carried on so successfully at Forest. This success has been due largely to Mr. Johnson's efforts.

Subjects: "Care and Cultivation of Fruit," "Insects and Fungi Affecting Fruit and Trees," "The Spraying of Fruit," "Marketing and Shipping of Fruit," "Co-operation," "Growing and Marketing of Berries." Evening: "Irrigation and Fruit Growing in California and Oregon."

Kerr, W. J., Ottawa.—Mr. Kerr has been an extensive grower of small fruits and vegetables for the past fifteen years, and has been able to keep in touch with the work along these lines at the Central Experimental Farm. Mr. Kerr has attended special series of orchard meetings, and his addresses to farmers in Eastern Ontario as to the possibilities of fruit-growing should prove an incentive to them to go more largely into this profitable branch. Mr. Kerr was one of our most valued Institute workers in the winter of 1906-1907.

Subjects: "Care of the Farm Orchard, Garden and Lawn," "Commercial Fruit Growing," "How to Interest our Young Folk in the farm and Home," "Short Talks on Poultry."

Kitchen, E. W., Lovering.—Mr. Kitchen cleared his farm from the original forest and has been in close touch with agricultural matters in Ontario for over thirty years. He is specially efficient on the subject of "Poultry Raising" and is in a position to give up-to-date and valuable instruction upon all branches of the industry.

Subjects: "Improvement, Feeding and Marketing of Poultry from a Farmer's Standpoint," "The Hog, Its Profits to the Farmer," "Our Lands for Dairying or Feeding Purposes." Evening: "Our Homes for Our Boys."

Kydd, W. F., Simcoe.—Mr. Kydd talks on horses, dairy cattle and small fruits. He has had a large practical experience in all these departments, and being an aggressive, forceful speaker, his words carry weight. He has also had wide experience in Fair matters, having been superintendent of the horse department of probably the largest purely agricultural show in the Province. He is also a judge of both light and heavy horses, and, as such, has been invited to place awards in many parts of Ontario. He is one of our most acceptable Institute speakers, and has done similar work in other Provinces.

Subjects: "Am I Raising the Most Profitable Horse?" "The Dairy Cow, Her Summer Feed and Winter Care," "Small Fruits and Care of Grape Vines," "Potato Spraying," "Ventilation of Farm Buildings." Evening: "Dropped Stitches."

LEE, ERLAND, Stoney Creek.—Mr. Lee has made his reputation as a practical dairy farmer. He is familiar with all kinds of farm work, as well as the manufacture of milk into butter. He practises soiling to a large extent with his cows. Having been secretary of South Wentworth Farmers' Institute for many years, he is in a position to give assistance and advice of value to officers.

Subjects: "The Codling Moth and Apple Scab," "Conservation of Soil Moisture," "Breeding and Feeding of the Dairy Herd," "Care of Milk for the Factory and Creamery," "Home Dairying," "Treatment of Milk Fever," "The Silo." Evening: "Improvement by Selection."

LENNOX, W. J., B.S.A., Newton Robinson.—Mr. Lennox is the son of a successful farmer in the County of Simcoe, and has always taken an active interest in the work as conducted on his father's farm. He has taken special pride in the production of different kinds of fowl since he was a mere lad and has won many prizes at local exhibitions. Mr. Lennox lives in the midst of a section noted for the production of alsike and red clover, and has been successful along these lines for a number of years. The young men and women of the farm should be much benefited by what Mr. Lennox has to say, for, although he is a comparatively young man, he has already shown what can be done by systematic study and close application.

Subjects: "Sheep, Breeds and Management," "How to Improve Our Live Stock," "Judging of Beef Cattle and Sheep," "Poultry for the Farmer." Evening: "The Farmer's Garden," "Training of Young Horses."

LEWIS, F. M., Burford.—Mr. Lewis has had much to do, as secretary, with the success of the South Brant Farmers' Institute. He has followed farming all his life, and is the owner of a good orchard and pays special attention to the production of potatoes. His success as a feeder of steers for beef, and pigs for bacon has been quite marked.

Subjects: "Growing and Feeding of Alfalfa," "Clover, the Key to Successful Farming," "Green and Barnyard Manures, their Care and Application," "Corn Growing, and the Silo," "Potato Growing," "The Farmer's Interest in Denatured Alcohol," "Waste Places."

LICK, ELMER, Oshawa.—Mr. Lick makes a specialty of fruit culture. He has had charge of a large orchard for a number of years, and when the Fruit Marks Act was passed by the Dominion Government he was one of the first inspectors to be appointed by the Dominion Department of Agriculture. In this capacity he has had opportunity of looking into all matters connected with the fruit industry, from the cultivation of the soil to the disposing of the products. He, therefore, speaks with authority, and can view the question both from the producers' and the commercial standpoint.

Subjects: "The Production of Apples," "Marketing Apples," "The Uses of Cement About the Farm," "Growing Corn," "The Farmer's Garden."

MCKENZIE, A. G., Fairview.—Mr. McKenzie is engaged in mixed farming in North Oxford. He started on his own farm ten years ago in the forest condition; has had considerable experience in clearing land, erecting buildings, fencing and draining, works a close rotation and feeds all farm produce to stock. He is a close student and has the advantage of college training. He has the faculty of imparting practical knowledge in a clear and forceful manner.

Subjects: "The Principles of Cultivation and Rotation," "Laying Out of the Farm and Planning of Buildings for Utility purposes," "Care of Domestic animals," "Building up a Home."

McMillan, Thos., Seaforth.—For many years Mr. McMillan has taken a deep interest in Institute work, being president of his local Institute at the present time. He is a practical farmer and makes a specialty of beef cattle and heavy horses. His advice on general farm practices is based upon years of successful experience and observation. His talk to young people is most inspiring and the young men especially cannot well afford to miss the opportunity of hearing him.

Subjects: "Heavy Horses," "Beef Bullock," "Soil Cultivation," "Highway Improvements." "The Demands of Canadian Agriculture," "A Talk to Our Young people."

Mason, T. H., Straffordville.—When the Ontario Agricultural College at Guelph first opened its doors to farmers' sons, Mr. Mason was one of the first to enroll. He spent two years at the Institution at that time, and has been able, as a result of his College work, to put into practice on his own farm so many modern ideas and methods, that his neighbors have found his farm and farm work a constant inspiration to them. Mr. Mason made a specialty of dairying, hog raising, and production of corn. He has kept in close touch with the work of the College through all the years and can give much of value regarding the work of that Institution, as well as of the Experimental Union. Mr. Mason is engaged during the greater portion of the year in work under the direction of the Seed Division of the Dominon Department of Agriculture.

Subjects: "Care and Food of Dairy Cattle," "Hog Raising," "Sheep Raising," "Corn for Silage," "Maintenance of Soil Fertility," "Seed Improvement." Evening: "A Trip to the Maritime Provinces," "Changing Conditions of Ontario Agriculture.

Nash, C. W., 94 Lee Avenue, Toronto.—Mr. Nash, author of "The Vertebrates of Ontario," has an international reputation on the subjects that embrace natural history. He has long been an authority on birds, and has written bulletins both for the Department of Agriculture and for the Department of Education on this important subject. His talks also deal with plant and insect life, as well as the rearing and breeding of domestic animals. Probably there is no one on the staff who can better interest young people at Institute meetings than Mr. C. W. Nash.

Subjects: "How Plants Grow," "Stock Breeding," "The Value of Our Birds," "Our Insect Pests," "Nature About the Farm," "Farm Forestry."

Ness, Robt., Howick, Que.—It is only necessary to state that the Robert Ness referred to is the well-known importer and breeder of Ayrshires and Clyde horses. His successes in the show ring are well known to all who are at all acquainted with the exhibitions of dairy cattle. Mr. Ness' successes at the National Dairy Show, Chicago, 1907, are fresh in the minds of Ontario dairymen.

Subjects: "The Breeding and Feeding of Heavy Horses," "Dairy Cattle," "The Improvement of Live Stock," "The Agriculture of the British Isles."

Orr, J. E., Fruitland.—Mr. Orr lives on a 125-acre fruit farm, nearly every foot of which is devoted to fruit-growing. Living, as he does, in one of the best sections of the Niagara District, and specializing as he does in the production of fruit, Mr. Orr has a technical knowledge of this subject possessed by few men of his age. From the cultivation of the soil to the marketing of the fruit, he is familiar with every detail.

Subjects: "Some Insect Enemies of the Orchardist," "Mistakes Made in Spraying," "Notes on Plums," "Controlling the Codling Moth," "The Black Knot, and How We Exterminated It in Our Township," "The Culture and Care of Fruit Trees," "Can We Overcome Off Years in Our Orchards?" "How and When to Prune."

PAGET, J. N., Canboro.—Mr. Paget is well known in dairy circles through his connection with the Western Dairymen's Association. He has been either director or president for a number of years, and is now a member of the directorate. Mr. Paget is particularly well known in his own district for the aggressive and up-to-date methods he has adopted in conducting his dairy business. He is not only a thoroughly practical man, but is capable of presenting the results of his experience in a clear and forceful manner.

Subjects: "Care and Production of Milk," "Profit and Loss in Dairying," "Handling the Finished Product Until it Reaches the Consumer," "The Growth of Alfalfa and its Importance to Dairymen." Evening: "The Relation Which Should Exist Between Producer, Proprietor and Maker."

PEARCE, JOHN S., London.—The name of John S. Pearce is well known throughout Ontario as being for 20 years at the head of a most reliable seed firm. He has been Parks Superintendent for the City of London for the past five years, having charge of the parks and gardens and general horticultural work throughout the city. He also has control of the trees on the streets and boulevards. He has extended experience and is thoroughly in touch with all horticultural work as well as tree planting, pruning, and care of all classes of trees and shrubs. His subject—"Selection, Care and Cultivation of Seeds" is a very important one.

Subjects: "Selection, Care and Cultivation of Seeds," "Hints to the Flower Lovers," "Trees, and Tree Planting for the Farm, School, Church, Cemetery and Roadway," Pruning and Care of Trees," "Shrubs, Bulbs and Flowers."

PEART, A. W., Burlington.—Mr. A. W. Peart is well known as one of the successful fruit men of the Burlington District. His many duties in a private and public capacity prevent him from undertaking much Institute work. His services are always sought for and the instruction given is much appreciated by fruit men generally.

Subjects: "Apples, Pears, Plums, Blackberries, Raspberries, Currants, their Varieties, Cultivation, Marketing, etc.," "Insects and Fungi Injurious to Orchards, and Methods of Combating Them," "Underdraining," "Management of Soils," "The Application of Fertilizers," "Agricultural Education," "Leaks on the Farm."

PEART, H. S., B.S.A., Jordan Harbor.—Mr. Peart is the son of a prominent fruit-grower, and has had the advantage of a full course in Horticulture at the Agricultural College, as well as experience as a teacher in the Horticultural Department of that institution for a couple of years. He has been appointed to superintend the Fruit Experiment Station at Jordan Harbor. Mr. Peart has given special attention to the production of small fruits and vegetables, and is prepared to give instruction along all lines of fruit-growing.

Subjects: "Production of Small Fruits," "Pruning and Grafting," "Production of Crops for Canning Factories."

PHILP, JNO. R., Maple Lane.— Mr. Philp is a practical farmer and has for many years carried on farming operations on his 150 acre farm in South Grey. He is enthusiastic about the value of short rotation for combatting weeds, and the appearance of his farm proves that he has made good use of

the short rotation, as he has one of the cleanest farms in South Grey. His past experience in public speaking should enable him to present his subjects in a clear and forceful manner.

Subjects: "Growing Clover for Seed, Including Seeding, Harvesting, Threshing, Cleaning, Marketing, etc.; also Curing for Hay, and Value as a Fertilizer," "The Growing of Jerusalem Artichokes for Hogs," "Planting Trees and Beautifying the Farm," "Care and Application of Manure," "Cultivation and Crop Rotation Including Rape and Clover," "Farm Water Supply."

Publow, G. G., Chief Dairy Instructor for Eastern Ontario, Kingston.—Mr. Publow is well known in the Province as the man who has done so much to improve the quality of cheese in the eastern sections of Ontario. He has been Chief Instructor since the syndicate system was inaugurated and knows better than any other man the requirements of the different sections. His addresses upon the "Sanitary Requirements of Cheese Factories" and "The Production and Care of Milk Upon the Farm" are presented in a forcible and convincing manner.

Subjects: "The Production and Care of Milk for Cheese Factories," "The Importance of Properly Built, Well Equipped and Sanitary Factories," "Skill and Forethought Essential in the Manufacture of Cheese," "The Cheese Industries of the Dominion."

Raynor, T. G., B.S.A., Ottawa.—There will be few, indeed, of our readers who do not know Mr. Raynor. He has been in nearly every Institute district in Ontario, as well as in some of the States of the Union. He is a good speaker and is thoroughly familiar with his subjects. He is a graduate of the O.A.C., has been president of the old Central Farmers' Institute, and has been identified with nearly every progressive agricultural movement in Ontario during the past twenty years. Mr. Raynor now has charge of the Ontario work under the direction of the Seed Division of the Dominion Department of Agriculture.

Subjects: "Noxious Weeds and How to Eradicate Them," "Seed Selection," "Soil Cultivation," "Potato Growing," "How the Public School Boy Can Handle the Weed Question?" Evening: "Life's Opportunities."

Reed, Dr. Henry G., Georgetown.—Having had a good practical farm training, and a thorough course in veterinary science, Dr. Reed is able to deal not only with the problem of breeding and feeding live stock, but can also discuss the question of "Domestic Animals in Health and Disease." Dr. Reed has been much in demand to judge live stock at fall fairs, and his Institute work has been entirely satisfactory and much appreciated.

Subjects: "The Influence of Natural Laws on the Breeding of Live Stock," "Horse Breeding," "Care and Feeding of Horses," "The Horse's Foot in Health and Disease," "Care of the Brood Mare and Her Foal," "Parturient Diseases of Cattle." Evening: "The Training of Young Horses.

Rennie, Simpson, 454½ Ontario Street, Toronto.—The name of Rennie needs no introduction to the farmers of Ontario. Mr. Simpson Rennie was connected with the Agricultural Club formed in Scarboro Township thirty-five years ago, and attributes much of his success to the knowledge gained from the papers and discussions given at the club long before the establishment of Farmers' Institutes. Mr. Rennie is one of the best authorities we have on all lines of general farming. His farm won the gold medal in the "Good Farms Competition" in Ontario in 1883.

Subjects: "Weeds and How to Eradicate Them," "Rotation and Cultivation of Crops, "How to Improve Seeds and Grain by Selection," "Cultivation of Roots and Corn."

Reynolds, A. J., Scarboro' Junction.—Mr. Reynolds is secretary of East York Institute. Besides the regular Institute meetings he and his fellow workers have held a series of special meetings conducted entirely by local talent, and without any assistance from the Department. The Annual Seed Fair of East York, of which Mr. Reynolds is also secretary, has proved a very instructive line of work for the Institute members. Unfortunately Mr. Reynolds cannot conveniently leave home for a long trip, but we are glad to place his name on our reserve list.

Subjects: "The Dairy Cow; Her Care and Feed," "Corn and the Silo," "Clover Growing," "Objects and Methods of Cultivation," "Seed Fairs," "Sugar Beets."

Rocheleau, Denis, Tecumseh.—Mr. Rocheleau is one of the successful farmers of Essex County, and has been particularly successful in the production of market garden crops. His experience as a dairyman and of general from work renders his instruction along these lines of special value. Mr. Rocheleau is able to give his instruction in both French and English.

Subjects: "Home Dairy Work," "The Farmer's Fruit and Vegetable Garden," "The Growing of Potatoes," "Cultivation of the Land."

Sanders, W. D., Exeter.—Mr. Sanders has been connected with Institute work in South Huron for about seven years. He is now president of that Institute and takes an active interest in other agricultural organizations of the locality. Mr. Sanders has made a success of farming. This he attributes to his close study and observation right on the farm. He is an experienced breeder of horses, cattle, sheep and swine.

Subjects: "Care and Application of Farmyard Manure," "Short Rotation; Its Effects Upon Weeds," "The Fertility of the Soil, and Labor-Saving Methods in Preparing Root Land," "Our Duties and Privileges on Farms."

Shaw, John C., Norwich.—Mr. Shaw is a successful farmer in the County of Oxford, having removed from the County of Wentworth some few years ago. Since coming to South Oxford he has demonstrated that money can be made from a run-down dirty farm at the same time that it is being put in first-class condition. Mr. Shaw's advice on this line of work, as well as upon general farm topics should prove of interest and benefit to the districts which he may visit. Mr. Shaw has won medals for excellence in quality of farm products as well as for the appearance of his farm.

Subjects: "How to Increase the Production of the Average Farm," "The Buying and Building Up of Run-down Farms as an Investment," "The Prevalence of Weeds, and How to Eradicate Them," "Social Conditions on the Farm."

Shearer, W. C., Bright.—Dairying is the particular department of farming in which Mr. Shearer has been eminently successful. He has kept records of the feed consumed by the hogs produced during the past two seasons and will be able to give information of much value regarding the feeding of sweet pasteurized whey in conjunction with other food stuffs. He is thoroughly practical, a good speaker, an Institute man of experience for some years past, and a most acceptable delegate. As will be seen from his subjects, Mr. Shearer is also prepared to discuss the bacon, seed and corn questions.

Subjects: "Production and Care of Milk and the Pasteurizing of Whey," "Rotation of Crops and Selection of Seed," "Breeding and Feeding the Bacon Hog," "The Dairy Cow for Profit," "Growing Corn Successfully." Evening: "Successful Agriculture."

Sheppard, Fred A., Queenston.—Mr. Sheppard is a successful fruit farmer in the celebrated Queenston District. He has made a specialty of packing fruit in fancy boxes for the best trade. He has also been particularly successful in grafting and budding, and gives illustrations of both these methods of propagation at the meetings. He is also a producer of tomatoes, and talks tomato culture from the cold-frame to the market.

Subjects: "Propagation of Fruit Trees, Vines, Care of Orchards and Vineyards," "Clover, Corn and Roots," "The Importance of Soil Moisture and How to Conserve It," "Small Fruit for the Home Market," "Insects and Fungi Injurious to Our Fruit Crop," "Weeds, and How to Destroy Them," "Some Advantages of Living on a Farm."

Sherrington, A. E., Walkerton.—Mr. Sherrington is well up in matters pertaining to fruit culture, and is known in the Lake Huron District as a "co-operative farmer," for he believes that "in union is strength." Mr. Sherrington has paid special attention to the subject of co-operation, and has been influential in establishing many co-operative fruit associations in Ontario.

Subjects: "Orchard Management," "Planting, Pruning and Grafting," "Spraying as a Preventive of Insects and Fungus Diseases," "Co-operative Marketing of Farm Products," "Conservation of Soil Moisture," "Selection of Seed Grain and the Eradication of Weeds, "The Importance of Uniformity, Quantity and Quality in Farm Products" (afternoon or evening). Evening: "The Farmer's Fruit Garden," "Beautifying a Farm Home."

Standish, Dr. J., Walkerton.—After a thorough training in practical work on his father's farm in the County of Wellington, Dr. Standish took a course in veterinary science and followed that profession for some twenty-five years. He has done considerable Institute work in Ontario, and the other Provinces of the Dominion. He has been a prominent judge of live stock at fall fairs for the past thirty years. Dr. Standish is an authority on the subject of horses, beef cattle, and bacon hogs, and is also prepared to discuss general farm management, as he has brought a run-down farm into excellent condition.

Subjects: "Breeding of Horses," "Selection and Feeding of Beef Cattle," "Requirements of the Bacon Hog Industry," "Diseases of the Digestive System of Cattle," "Unsoundness in Horses and the Best Means of Detecting the Same." Evening: "Training of the Young Horse," "Prevention of Diseases in Domestic Animals."

Stephen, W. F., Huntingdon, Que.—Mr. Stephen is secretary of the "Canadian Ayrshire Breeders' Association" and the "Montreal Milk Shippers' Association." He is widely known as a successful breeder of Ayrshire cattle, and has been sought after through the whole Dominion as a judge of dairy cattle. Mr. Stephen owns a good working herd of pure-breds and his advice to dairymen is indeed valuable.

Subjects: "Soil and Its Tillage," "Successful Corn Growing for Silage," "Good Roads and How to Make Them," "Successful Dairying," "The Ideal Farmer," "Shall Our Boys and Girls Remain on the Farm?"

Stevenson, R. S., Ancaster.—Mr. Stevenson is one of the oldest Institute workers in Ontario. Being a practical dairyman and breeder of dairy cattle, he has been identified with advanced dairy work in Ontario for a long time. During the past few years he has acted as judge of live stock at many fall fairs, and has given excellent satisfaction. No matter where he goes, Mr. Stevenson is always welcome, and is recognized as a man who thoroughly understands the work he undertakes to discuss.

Subjects: "A Practical Talk on Dairy Cows, Breeding, Feeding, Selecting, etc.," "Growing the Corn Crop and Handling It to the Best Advantage," "How to Make Dairying More Profitable on the Average Farm," "The Growing of Root Crops," "The Cream Separator on the Farm," "The Farm Water Supply."

SWALE, CECIL, Wiarton.—Mr. Swale is enthusiastic about corn ensilage. He has found it a paying feed, and has made many converts to its use in his locality. Mr. Swale is one of Ontario's most successful potato growers. This subject should receive greater attention on the part of Ontario farmers.

Subjects: "Corn, Mangels and Hay," "Modern Potato Culture," "Rearing and Feeding of Sheep," "Clover Production and Destruction of Weeds," "Care of Our Own Forests," "Beneficial Birds of Prey, and Poultry Production."

WARREN, J. L., Acton.—Mr. Warren has had experience as secretary of Halton Institute, and it was due largely to his aggressive work that it became the banner Institute for Ontario some years ago. He is a thorough, practical farmer, and his addresses are interesting and instructive. Institute officers will find Mr. Warren competent to give them valuable information as to conducting local Institutes.

Subjects: "Clover as a Feed and Fertilizer," "Corn and the Silo," "Breeding and Feeding of Beef Cattle," "Some Methods of Destroying Weeds." Evening: "Farmers' Institute Clubs," "The Education of Our Sons and Daughters.

WHITE, R. E., Balderson.—Mr. White is looked upon as one of the Progressive farmers of Lanark County. He is a breeder of pure-bred Shorthorn Cattle and follows general farming. Mr. White has taken a deep interest in the Farmers' Institute Club at Perth and should be able to render valuable advice at Institute meetings this winter, upon the formation and carrying on of such organizations.

Subjects: "Tillage and Rotation of Crops," "Conservation of Soil Moisture," "Corn and the Silo," "Soiling of Crops and their Importance," "Breeding, Feeding and Selection of Beef Cattle," "The Dual Purpose Cow." Evening: "How can the Farmer Spend His Winter Evenings to Best Advantage?"

WIDDIFIELD, J. W., B.S.A., Uxbridge.—Mr. Widdifield has, since his graduation from the O.A.C., managed a farm successfully in Ontario County. Mr. Widdifield is much sought after to assist in local Institute work, and his success as a practical farmer has induced the Department to send him to a few regular meetings. After visiting the North-West, Mr. Widdifield returned well satisfied with the conditions in Ontario, and should be able to state to the young farmers of this Province something which will be an incentive to them to put forth greater efforts to improve and extend their agricultural operations.

Subjects: "Increasing and Preserving Soil Fertility," "Clover, Corn and Roots," "Implements of Cultivation, and Their Proper Uses," "How to Preserve a Moist Soil in a Dry Season." "Destruction of Noxious Weeds." Evening: "Nature Study," "The Poetry of Farm Life."

AGRICULTURAL TEACHERS IN HIGH SCHOOLS.

The teachers named below have given special instruction during 1907-08 along agricultural lines in the High Schools at the places indicated. They have also acted as representatives for the Department of Agriculture for Ontario in the districts surrounding the places at which they are located. These gentlemen will be available for many of the meetings in their respective localities.

The officers of the Institutes concerned should place themselves in communication with these local representatives and make arrangements for them to attend as many meetings as possible. Always address them care of Collegiate Institute.

HAMER, R. S., B.S.A., Perth, Ont.—Mr. Hamer is a son of one of the most progressive farmers in South Simcoe, a graduate of the Ontario Agricultural College, and was for some time editor of the *O. A. C. Review*. He also spent two years on the western staff of the *Farmers' Advocate*. Mr. Hamer was a member of the College team which won the trophy for stock judging at Chicago in 1906, and had the distinction of being first in individual score.

Subjects: "Underdrainage," "Clover and Its Benefits," "Farm Crops in Lanark County," "Live Stock in Lanark County." Evening: "Agricultural Education."

HARE, J. H., B.S.A.—Mr. Hare is the son of a practical farmer and has had considerable experience in farm work. After taking the full course in the Agricultural College, Guelph, he was employed in the Soil-Physics Department for a short time, after which he was appointed to take charge of agricultural work in Ontario County, as the representative of the Department.

Subjects: "Farm Drainage," "Noxious Weeds and Methods of Eradication," "Agricultural Education."

HART, F. C., B.S.A., Galt, Ont.—Mr. Hart was brought up on a farm in Cumberland County, Nova Scotia. He is a graduate of the Ontario Agricultural College in Biology, and spent two years in the Dominion Forestry Branch, working on reserves in Manitoba and Saskatchewan.

Subjects: "Common Fungus and Bacteriological Diseases," "Beneficial Insects," "Traps and Sprays," "Weed Seeds and the Seed Control Act."

MCKENNEY, A., B.S.A., Essex, Ont.—Mr. McKenney, after considerable experience in Institute work, entered upon a course at the Ontario Agricultural College, from which he is a graduate. Since that time he has addressed a great many audiences along agricultural lines. Mr. McKenney is a first-class judge of live stock, having been a member of the College team which won the trophy at Chicago in 1906.

Subjects: "San José Scale," "Seed Corn Breeding," "Tile Drainage," "Agricultural Education for the Farmer's Son."

MORTIMER, R. E., B.S.A., Collingwood, Ont.—Mr. Mortimer comes from Dufferin County, where he was brought up on the farm. He is a most practical young man and favorably impressed the College staff when taking his course for the Agricultural degree. For two years after graduation he put his technical knowledge to practical use upon his father's farm.

Subjects: "A Quiet Talk to Farmers," "Eradication of Weeds," "Birds in Their Relation to Agriculture," "The Bacon Hog," "Mutton Sheep," "Beef Cattle," "The Dairy Herd," "Home Dairying," "The Fruit Plantation," "Beautifying the Home."

Munroe, W. A., B.S.A., Morrisburgh, Ont.—Mr. Munroe is a graduate of Queen's University, also of the Agricultural College, Guelph, and has the advantage of being thoroughly familiar with the practical work of the farm. In 1905 he was a member of the stock judging team at Chicago, and in 1906 was a member of the travelling dairy and stock judging school in Alberta.

Subjects: "The Building Up of the Dairy Herd," "The Sanitary Production of Milk," "Rotation and Cultivation," "The Education of the Farmer's Son."

Reed, F. H., B.S.A., Lindsay, Ont.—Mr. Reed was a successful practical farmer before he took a course at the Ontario Agricultural College from which he graduated. He was a member of the staff of said college for two years. His wide range of practical experience and the opportunities which he has had during the past year to study conditions in Victoria and Peterboro Counties places him in a position to render most valuable services to the farmers of these counties.

Subjects: "Tile Draining—Its Cost and Its Returns," "Systematic Improvement of Farm Crops," "Important Principles in Live Stock Breeding," Separating and Testing Milk and Cream," "The Farm boy at Fifteen," "Short Courses in Agriculture," "Agricultural Education in the Collegiate Institute."

WOMEN INSTITUTE LECTURERS AND SUBJECTS.

Ashley, Mrs. M. L., Londesboro.—Mrs. Ashley has had experience in hospital work as well as in the management of a "Private Home." This together with her experience in lecturing both in the United States and Canada, specially qualifies her for Women's Institute work. Her instruction is given in a most convincing and pleasing manner.

Subjects: "Responsibilities of Mothers to Daughters and Vice Versa," "The Feeding and Care of Infants," "The Sacredness of the Body," "Home-making Versus housekeeping," "How to Promote and Utilize the Institute," "The needs of the Twentieth Century," "The secret of a Nation's Power."

Dr. Annie Backus, of Aylmer, brings her medical training and practice as well as her experience in country life and places them at the disposal of the women who hear her talks. She is pre-eminently practical, and willing to help womankind. It is to be regretted that Dr. Backus can devote only an occasional day to Women's Institute work, her local practice absorbing practically all her time. Dr. Backus has been closely identified with Institute work throughout the Province for years.

Subjects: "Hygiene of the Home and Aids in Nursing," "Consumption and Its Prevention," "The Importance and meaning of Woman's Work," "Training in the Home," "Education of Girls," "Physical and Mental Harm in Faultfinding," "Poultry Raising."

Campbell, Mrs. Colin, Windsor.—Mrs. Campbell has long been associated with Institute work; in fact she is a pioneer and with her opportunities for comparing the past with the present, and her knowledge and appreciation of what the Women's Institutes have done for Ontario, she is ready to impart her enthusiasm, in addresses on practical home subjects.

Subjects: "Canning Fruits and Vegetables," "The Care and Uses of Milk," "The Comparison of Our Common Foods," "Poultry Raising—Is it a Profitable or Losing Business?" "The Housekeeper and Her Importance to the State."

Miss Susie Campbell, of Brampton, is one of those speakers who leave audiences enthusiastic in pursuing definite lines of work. She has a wide range of those subjects which are most needed by the woman and the girl on the farm. Her success in extending the organizations to all parts of Peel county has been most marked, and her advice to officers should prove of great value to them in furthering the interests of the Institutes.

Subjects: "The Ideal Home, and Great Men," "Character," "A Young Lady's Accomplishments," "The Influence of Women," "The Judicious Housekeeper and Homemaker," "Our Fair Dominion," "Demonstrations in Needlework," "Labor Saving Devices."

Carter, Miss Gertrude, 26 Nottingham St., Guelph.—After graduating from the Guelph Dairy School, Miss Carter immediately went into creamery work. At the present time Miss Carter is in her senior year at the Macdonald Institute. She has a combination of scientific knowledge and practical application. She will bring a great deal of her college enthusiasm into this season's work, which gives promise of being particularly up-to-date and instructive.

Subjects: "Value of Fruits in Diet, and Their Use in Making Desserts," "Arrangement of Daily Menu to Lessen Labor," "Simple and Necessary Kitchen Conveniences," "Care of Milk," "The Home—From Different Standpoints."

Miss B. Duncan, of Emery, has had scientific training in the Hamilton School of Domestic Science. This with her experience in country and city life to round out the application of her addresses, should gain for her an appreciative reception. Miss Duncan is retrenched for this series by the Macdonald Institute course in dietetics.

Subjects: "Use of Food to the Body," "Everyday Helps for the Housewife," "Hints on Selecting and Caring for Meats," "Food Values," "Girls and Their Ideals," "Country Homes," "Diets Suitable for Different Ages and Occupations."

Miss L. Duncan, of Emery, has been markedly successful in extending the work of the Women's Institute in West York. Her suggestions to Institute officers, as to ways and means of interesting all classes and ages and in making the meetings most helpful, will be much appreciated.

Subjects: "House Plants," "Systematic Housework," "Simple Home Decorations," "Ways of Arousing Interest in Civic Improvement," "Institute Work—Helpful Hints to Institute Officers."

Gilholm, Miss B., Bright.—Miss Gilholm has been an efficient officer of the District Women's Institute of North Oxford and is able to render much assistance to officers of both District and Branch Institutes when attending their regular meetings. Miss Gilholm has taken the regular Creamery course at the Guelph Dairy School and holds a specialist's certificate in butter-making, also a diploma for proficiency in the theory and art of butter-making. Miss Gilholm's knowledge and appreciation of country life places her in a position to impart information in a manner much appreciated by the members in general.

Subjects: "Will the Dairy Cow Remove the Mortgage?" "Care and Handling of milk and cream by the producer and in transit," "Our Friends and Foes—Bacteria," "Institute Work," "Our Ain Fireside."

Miss G. Gray, of Toronto, is a Domestic Science Graduate and is regularly engaged in New York and Ontario Women's Institute work. She imparts knowledge in a clear, forceful and attractive manner.

Subjects: "Chemistry of the Household," "Foods,—Their Use and Preparation," "Interior Decoration of the Home" (Illustrated), "Science in the Home," "Life's Talisman," "Our Assets."

MacMurchy, Dr. Helen, 133 Bloor Street East, Toronto.—Dr. MacMurchy's professional duties prevent her from devoting much time to Women's Institutes. However, the limited time which she gives to this work is much appreciated by the Department and by the Institute members. Her addresses are pointed, full of enthusiasm, and always adapted to the needs of the locality visited.

Subjects: "Twentieth Century Health Problems," "Health and the House," "The Health of Women and Girls," "Accidents and Emergencies," "Disease Germs," "Tuberculosis," "Patent Medicines," "The Day's Work."

Millar, Miss Bella, Guelph.—Miss Miller is one of our most experienced workers, having attended meetings in practically all sections of Ontario, also in New York State. She took charge of a travelling dairy school in Nova Scotia for several seasons. She is able to give instruction upon all lines for general work in which the home-maker is interested. Miss Millar's special training in home nursing and emergencies places her in a position to give valuable instruction along this line.

Subjects: "Hints for the Home Nurse" (demonstrated), "Home Sanitation," "Mistakes made in the Farm Dairy." Evening: "As others See Us," "What Money Cannot Buy."

Reynolds, Miss Lulu, Scarboro Junction.—Miss Reynolds has had extended experience as secretary of the East York Women's Institute. She has also assisted her father in his work as secretary of the Farmer's Institute. Her extended experience places her in a position to be of much assistance to Institute officers wherever she may attend. She is a most enthusiastic worker and her addresses are well received.

Subjects: "Foods; Their Different Constituents," "Horticulture," "Character Building"

Miss Isobel Rife, of Hespeler, brings her extensive public school experience as an asset into Women's Institute work. She is skilful in imparting instruction and in its application. Her lectures are practical and delivered in a pleasing manner. She is well qualified to advise officers as to the extension and operation of Institute work.

Subjects: "Helpfulness in Women's Institutes," "Sunshine, Pure Air and the Bath," "Home Treatment of Consumption," "Education of our Young People," "The Home in its Attitude to the School," "Both Sides of the Rolling Stone."

Price, Mrs. L. Gray, 5 Howland Avenue, Toronto.—Mrs. Price is one of our most experienced and acceptable Institute workers. Her scientific training and ability to apply the same to the problems of the household, place her in a position to render specially valuable service to Institute members.

Subjects: "The Value of Fruit in Our Diet," "Foods" (illustrated by charts), "Meats" (illustrated by charts), "Domestic Science on the Farm," "Making Home Attractive," "Every Man the Architect of His Own Fortune," "Home Decoration."

Rose, Miss Laura, of Guelph, needs no introduction to the Women's Institutes of Ontario. Her ability as a public speaker and her wide knowledge of affairs place her in a position to render the best services to the Institutes. She has charge of the Home Dairy Department at the Agricultural College, and has instructed many farmers' sons and daughters in the art of butter-making.

Subjects: "How to Increase Dairy Profits," "Difficulties in Butter-making, and How to Overcome Them," "What Milk is and how it should be

Cared For," "The Influence of Environment," "The Head, the Hand, the Heart,—the Tripod of successful work," "A Talk to Housekeepers on Housekeeping," "The Making of Bread and Buns."

SHANNON, Mrs. B., 519 Brunswick Avenue, Toronto.—Mrs. Shannon is a Domestic Science graduate and her experience as a housekeeper and Institute lecturer places her in a position to render excellent service to Institute members.

Subjects: "Household Hygiene," "Labor Saving Contrivances for the Housewife," "Home Nursing," "Comparative Value of the Different Cuts of Meat," "Food Values—Demonstrations on Meats, Vegetables and Soups."

SHUTTLEWORTH, Miss L., Guelph.—Miss Shuttleworth's special training in dairying, and her experience in practical work and teaching prove of great value in the Institute work.

SUBJECTS: "Cool Dishes for Summer Use," "Fruits—Methods of Canning, Preserving, Etc.," "Health as a Basis of Womanly Beauty," "Short Talks and Discussion on Cream Separators, Dairy Utensils and Their Care, Churning, Care of Milk and Cream," "The Needs of the Dairy Industry," "Evenings at the Homestead."

Mrs. F. W. WATTS, of Clinton, has proved herself an efficient officer as district secretary of the West Huron Women's Institute. She has had some experience in Institute work and uses great care in the preparation of her subject matter, and her services should prove acceptable to the Institutes visited.

Subjects: "Home Nursing," "The Bath, Fresh Air, and Exercise," "What Mothers Should Know and Remember," "The Benefits of Women's Institutes," "Happiness in the Home."

Miss MARY YATES, Macdonald Institute, Guelph, lends to her lectures the charm of the English gentlewoman. She is a certified poultry expert, a late instructor at Studley Agricultural College, Warwickshire, England, and has also had experience in the business management of a poultry farm. Her services at the Poultry Institutes conducted by the Department in the winter of 1907 were much appreciated. Miss Yates graduated from the 1908 Summer Class in Elementary Agriculture, held at the O.A.C. She is prepared to give practical demonstrations in plucking and trussing fowl.

Subjects: "The Management of Poultry," "Winter Egg Production," "Table Poultry," "Chickens as Gardeners," "Home Economics," "Our Servants—Earth, Air and Water," "Flower Borders without much trouble, and House Plants," "Problems of the Home—Financial, Training, etc.," "The Effect of Co-operation upon the community."

FARMERS' INSTITUTE CONVENTION.

Below we give a very brief report of the Farmers' Institute Convention, held on September 8 and 9, 1908, on the grounds of the Canadian National Exhibition. This Convention was largely attended and the different sessions proved of great interest to the delegates and we believe will result in an increased interest and more effective work during the coming campaign.

At 3 p.m. of September 8th, President Creelman, the presiding officer, after drawing attention to the good work being done by the various agricultural organizations in the Province, gave a brief history of Farmers' Institute work and impressed the lesson, learned from past experience, that the

success of Farmers' Institutes will be in proportion to the extent to which the farmers themselves take hold of the work.

"You men know your local conditions, know what kind of a speaker you want at your local meetings and when a man is talking twaddle or when he is talking sense. You have so managed those Institutes that now you accept only such men as are of a good practical turn and have a real message to your locality."

He expressed sympathy with the Superintendent in his endeavor to get men who were well suited to the different localities to which they were sent. He referred to the fact that the day was probably near at hand when we shall have to ask people to spend a couple of dollars and stay over night and all the next day, thus making it possible to take up larger problems and deal with them exhaustively. He concluded by saying, "However, I am proud of the Farmers' Institutes of Ontario, and when I go to the United States as I have been doing for the past twelve years, I feel that the Ontario Farmers' Institute system is second to none anywhere in the known world, and that it has been worked out by the farmers themselves. (Hear, hear.)

The Superintendent in his address, expressed gratification at the loyal support received from the farmers throughout the Province and stated that the success of the work would depend to a large extent upon a continuance of this. He appealed to those in attendance to make an effort to induce the farmers generally to make better use of the information contained in the literature sent out from the Department and the articles upon agricultural topics, as they appear from time to time, in the agricultural journals and the regular periodicals throughout the Province, which are devoting more and more attention to agricultural matters.

He advised a continuance of the Institute work along the lines which have been followed during past years, paying more and more attention to the practical side of the work, introducing demonstration in connection with the meetings as much as possible. This regular work may well be supplemented by the holding of special Institutes and the formation of Farmers' Institute Clubs.

Information will be found in this volume regarding the special Institutes held last winter and we believe that this sort of instruction will grow. The brightest outlook in Farmers' Institute work will be along the line of local organizations—Farmers' Institute Clubs. The small booklet on these Clubs is in the hands of the printer and will be ready for distribution in connection with the regular series of meetings to be held this winter.

Mr. Putnam appealed to the delegates to continue their support of the Institutes. "We cannot measure the influence of the Institute by the benefit derived by the individual who attends the meetings. The improved methods adopted as a result of the lectures or of the reading of the report and bulletins are of advantage not only to the comparatively small number of farmers who receive the information and inspiration direct, but each one who practises improved methods successfully, has an uplifting influence on the agriculture of the district. Do not weary, therefore, in well doing. The meetings may be small or the manifestation of interest confined to a few. If, however, you as officers, directors or lecturers can induce a few in each locality to become close students of their own business and thus be led to adopt the most profitable methods, you have rendered a valuable service to your fellow farmers and to the nation. The tens of thousands of practical farmers who attend the Institute meetings each season are not the only beneficiaries of the organization which has been and is doing so much to teach the farmer how to increase his profits and to make his isolation and his hermit

life a thing of the past and to place him in his proper sphere as a man amongst men.

The Superintendent regretted that the average profits of the fruitmen, dairymen, stockmen or general farmers of the Province as compared with the results attained by the most successful individual farmers showed too wide a difference. The gradual increase in the number of farmers who are making handsome profits is an encouragement to the Department and is turning the attention of the city residents to the farm lands of Ontario as a profitable investment.

In referring to the records of the past year, so far as attendance, membership, etc., was concerned, he expressed regret that a greater number of farmers were not taking an active part in the local Institute meetings. "Unless we can adopt some means whereby the farmers will be able to discuss their own business in their own way, we cannot hope for the best results."

Although the statistical records as contained in this volume are not very encouraging, the Superintendent expressed the belief that there never was a greater necessity for Farmers Institutes than at the present time, and that there never was a brighter outlook for the carrying on of the work to a successful issue if we can only secure the hearty co-operation of the officers and the farmers generally.

The success attained by the Women's Institutes has been largely due to the fact that local organizations had been formed and regular meetings held. If we can only induce the farmers to organization upon similar lines, the benefits to be derived from these local clubs and from the regular Farmers' Institute meetings as now held, will be much increased.

At the conclusion of the Superintendent's address there was a general discussion upon Institute work. Mr. A. J. Reynolds of East York expressed the belief that the work would be more effective were local talent developed to a greater degree. He stated that "we are more and more dependent upon the young men. We have to make some special effort now in order to keep up the interest and even maintain the membership we have. The literature sent out by the Department is worth many times all that we ask for membership fees. Many farmers would gladly pay if canvassed. Directors should do more canvassing."

Mr. Graham of Centre Grey believes that the progress of the Institute will depend largely upon getting in new recruits. Extra advertising and canvassing is about the only way. Mr. Graham stated that the farmers in his locality were waking up and taking a greater interest in the Institute.

Mr. Lewis of Brantford stated: "Our plan has been to call a meeting of our Board of Directors, about 40 of them, as soon as we get a list of the speakers and their subjects. We believe it is wise to have a large number of directors so that we may distribute them in every neighborhood. We expect to have our membership tickets sold before our meetings are held. If you tell me how many membership tickets you have sold I can tell you about what the attendance will be. Our directors do not expect the secretary to sell the tickets. We select some subject of special interest to us and get some local man to take up that subject and we pay him out of our local Institute funds. He knows the conditions that we have in our section. I believe there is more enthusiasm in a local speaker's discussion than in the other's. As to sending one speaker to a locality, that depends on your neighborhood. I think there is a great deal in the idea of taking one subject and threshing it out. Many of the sections would be much more benefited if they were to concentrate their energies on one thing as a specialty. If St. Joseph Island is specially adapted for raising sheep, by all means raise sheep. I believe it would be better than following so many lines."

Mr. Slater of South Waterloo: "In many sections we have perhaps two classes, and they want two subjects discussed. We sometimes put a local man on the program to speak on a subject, and we make a general discussion a very large feature. One of our difficulties is financial. We have 14 or 15 meetings in our district and we have never been more than $4 or $5 ahead, with all the money we can raise and all the members' tickets we can sell. If we had more money we could get better results."

"In regard to developing local talent, where we have a school teacher, we always put on a children's drill for the evening program. The children are meeting for perhaps two weeks before for drill practice, and thus the meetings become thoroughly advertised, and the mothers are anxious to have the children in the best form, and they are interested to see how the children conduct themselves at meetings. In this way we get up a very general interest in the locality. While we try to make the meetings instructive, at the same time we endeavor to make them interesting and attractive."

"For a good many years now, we have been using all the local men we could at the meetings, but the people got tired of the same man or men; they get tired even of the some delegates. I think it would be better if an exchange of local men could be made. For instance, North Waterloo could send their best local men to South Waterloo, and vice versa. It would not cost very much, as travelling expenses would be so light, and it would be much cheaper than sending a man from a far off section."

Mr. Morris of West Huron expressed himself thus: "I think a great deal of the fault lies with the Board of Directors and Officers of the Institutes. Some directors never approach a neighbor for a yearly membership fee. They take no interest in the work and they never attend a meeting. Last year we elected largely a new Board. We also asked for one gentleman speaker and one lady. We found it to work well because there are men who are not interested in farm work whose wives want to attend the meeting to hear this lady speak. Thus we get a great many more of our members than we would otherwise. As we all know, the Women's Institute has gone ahead with leaps and bounds, and we want to interest our men in the Institute work as the women are interesting their members. I think the secretary of an Institute is more important than the President, and a good energetic Board will increase membership."

Mr. W. J. Westington of Cobourg, West Northumberland, voiced the sentiments of his riding in the following summary: "Our county is the greatest apple-growing county in the Province. We also have sheep producing, general farming, raising of horses, etc. A man who will make a great success out of one of these lines, when you endeavor to educate him along another line, will be a failure, because it is not the line to which he is naturally inclined, not the way he has been brought up. We select the subjects adapted to the particular locality. In reference to developing local talent, we ask someone to prepare a paper on a subject specially interesting to that locality, usually a person of some little importance. Then a speaker will follow to bring out all the good points."

"There is a great long step between the people and us, and what we need is to establish township organization, and then send delegates and empower them to plant local Farmers' Institute Clubs, and leave the work of conducting Farmers' Institutes entirely to that Club in that locality. If there is a meeting or a supplementary meeting there, allow them to do just as they have done."

The East Peterboro delegate contributed a good suggestion: "Every Electoral district has one or more local newspapers whose editor attends our

meetings if we can possibly get him. If not, the secretary or some one else gives a short report and it is published in the local papers. That does a great deal of good. I notice our Superintendent encourages that all he possibly can, but I find the difficulty in getting local talent is that our young men go West, and it is pretty hard to get anyone to take their place. The cream of our section has gone from us, and it is very hard to get local talent."

The following advice is from Mr. W. C. Good, of Brantford: "Appeals for membership are generally made on a false basis, that is, with a selfish motive, telling a man he can get so much literature by paying 25 cents. We should appeal to his patriotic instincts, to his desire for the benefit of his neighbors, for the glory of his country, locality or community."

"There are a great many difficulties that face every man who works among organized farmers. There are many men who are older, not in years, but in attitude of mind, that you cannot get at. I don't believe we will do much for agriculture in this country till we get at the children. I believe a great deal of the effort of our Institutes ought to be devoted to getting at the schools and interesting the children in country life, trying to cultivate what I might call a new kind of patriotism—a patriotism for the welfare of their country and community as the main thing, and teaching them some means whereby they may contribute to the extension and the glory of their community and country." (Applause.)

Mr. C. C. James, Deputy Minister of Agriculture, expressed his pleasure at meeting with the farmers and fully believed that in order keep up the Institute, it is necessary to develop local talent. "Let the men who are known by their works stand up and discuss matters at the same meetings with men from a distance, who may be good talkers but whom the local farmers do not know quite well enough. You have a good organization. Perhaps it might be improved or enlarged or diversified. The women in their work have shown much can be done by spreading out. The Women's Institutes have increased because of two things: first, they are filling a want which nothing else supplies in women's life in the rural parts of the country. There are no other organizations to divide with them the time and attention that can be devoted to these women's meetings. They are going about it in a little different way from what the men are. They are not satisfied with one meeting in the year or even with two or three, but they are always having meetings, and having meetings everywhere. They have their lines out throughout the whole township and everybody has an opportunity to be drawn in and brought in connection with the central organization."

Mr. James appealed to the Institute officers to endeavor to keep the same people as members from year to year and to add as many new names as possible.

"You have been talking about organization. Well, you can build up the finest and most perfect organization in the world and set it down on paper, but it will not run itself. (Hear, hear.) The one great essential, more important than anything else in connection with this whole work, is that you shall get some one man who is just as much devoted to it as the man who goes out into the mission field. Reference was made a while ago to the superintendent of missions. In connection with this Institute work there is a demand for just as much devotion and energy and labor as there is in connection with any of our great church mission fields. If you will get into your Institute just one man who is on fire in connection with the salvation of the farmers of this Country and the building up of farmers' organizations, he will develop an organization if there is not one. He will take an organization and perfect it; he will gradually enthuse the other

members of that, and gather in others, until finally from him as a centre you will find that the whole Institute will become permeated and the work will go on improving. Search your Institute field over and see if you cannot get that man and bring him in, and try from the interior of your organization to work out a new life and a new energy, because it cannot be done from any other quarter. The President of the College cannot do it; the Superintendent of the Institutes cannot do it. You have to work out your own salvation on those lines."

ANNUAL MEETING.

There was a general discussion upon the advisability of making some change in the method of holding the annual meetings. The whole field was gone over very carefully, some being in favor of having the annual meeting remain as it is and others wishing it held in December or in connection with some of the regular Institute meetings held during the winter months. As it is now, there is great difficulty in many sections to get a representative gathering at the busy season—June 1 to 20, when annual meetings are held, while in other sections it is possible to have an enthusiastic and representative audience. By holding the annual meeting in the winter months, there will necessarily be more or less difficulty in carrying out the work connected with the holding of the winter meetings. It is, generally speaking, unwise to change officers in the midst of the campaign. Then again the finances of the Institute cannot very well be closed up for the year during the winter months when money is being paid out and received. The vote of the delegates indicated by only one of a majority that the time of holding the annual meeting be left as it is.

The Superintendent went over the whole ground, and after a little further discussion it was unanimously decided to leave the settling of the date of the annual meeting in his hands. After weighing all the statements made by delegates and the conditions to be met with at the central office, the following recommendation is made: that those Institutes which do not wish to have an annual meeting for the election of officers in June, announce such election to take place at a meeting to be held in some central locality in the riding during the regular series, the officers elected at that time not to assume office until the close of the Institute year—May 31st. This will necessitate a meeting of the officers for the two years, sometimes between the first and the twentieth of June, for the purpose of closing up the business of the year, choosing points at which to hold meetings during the following season and such other business as may properly be taken up at the annual meeting. Therefore the only business to be done at the winter meeting will be to elect directors representing the various parts of the riding and these directors at a meeting to be held between May 15 and June 20 shall elect from among themselves a president and vice-president, and from among themselves or otherwise a secretary-treasurer.

The evening session of the first day was devoted entirely to the work of "Farmers' Institute Clubs" and "special Institutes." Information regarding these two features of the work are given in a pamphlet regarding Farmers' Institute Clubs, and in other sections of this volume.

Advertising Institute Meetings.

Quite a lengthly discussion was held upon "Methods of Advertising Institute Meetings." It was generally conceded that advertising by poster and hand-bill and cards of invitation, should not be done too long in advance. It is well to have the local press draw attention to the meetings from time to time some weeks in advance of the meetings, and this should be followed by posters to be put up in the district concerned two or three weeks in advance of the meetings, and small hand-bills and special invitations, *i.e.*, cards, if it is thought well to send out cards, distributed or mailed 3 or 4 days in advance of the meetings. The hand-bills and cards should contain definite announcements as to the subjects to be taken up by the different speakers, and the hour at which the same will be treated. One delegate stated that he had very little difficulty in getting largely attended meetings now that the directors make a personal canvass. This gives excellent results. Do not have posters too large or too small, about 18 inches by 24 inches or slightly smaller is a very good size for posters, using clear black type. It has been found most advantageous to get the clergy, both Protestant and Catholic, to announce the meeting.

There is nothing which will take the place of personal invitation.

The school teachers can be of great assistance in distributing hand-bills three or four days in advance of the meeting.

The officers of the Institute must, first of all, decide as to the amount of money which they can spend in advertising, not losing sight of the fact that a few dollars extra spent in this way will result in increased attendance, and likely in increased membership, which will more than return in membership fees the extra amount laid out in advertising.

Co-operation of Directors.

The next subject for discussion "How Can a More Hearty Co-operation of the Directors be Secured?" brought out a fact which is known by most all Institute workers, that success cannot be expected unless the directors in the vicinity of the meeting are prepared to devote some time and thought to the work. They could render assistance, first, in deciding upon the programme, then in completing arrangements for halls, distribution of advertising material, etc. Two Institute workers of long experience made the statement that the success of the meetings depends largely upon the secretary, and we recognize the fact that unless the secretary is enthusiastic and prepared to devote time and thought to the work in hand the best results will not follow.

Excursions.

In the discussion of excursions run by Institutes to the Agricultural College, some dissatisfaction was expressed with the new regulations whereby the "split guarantee" is asked for by the railroad. Institute delegates were warned by one who had experience that they should be very careful in entering into an agreement where a split guarantee was one of the conditions, especially if the excursion is to extend over two days. It was recommended by Mr. F. M. Lewis of South Brant, that the public school-teachers and their older scholars be asked to accompany the excursionists to Guelph, where the officials would be glad to take charge of the teachers and scholars, and show them the work being done at the College of special interest and value to the boys and girls.

Time to Hold the Different Sessions.

The advisability of having forenoon and afternoon sessions instead of afternoon and evening meetings was discussed, and it was generally agreed that this was a matter which could best be decided by each Institute for itself. Many were strongly in favor of continuing evening sessions, as at that time they had an opportunity of enlisting the sympathy of the young people, and many a young man had received inspiration at the evening session which led him, in succeeding years, to attend the afternoon meetings, and thus get the benefit to be derived from the more practical nature of the work taken up in the afternoon.

In some localities it has been found advantageous to have the Women's Institute provide lunch, and some entertainment between the afternoon and evening sessions.

It is to be hoped that the suggestions given in the brief report above will be found of interest and value to Institute officers and directors, and we wish to impress them with the fact that, while the Department is prepared to do all that it can to assist the individual Institutes, a great responsibility rests upon the local officers, and the greatest success will result only when each individual connected with the work gives his best service to it.

SPECIAL INFORMATION FOR OFFICERS AND DIRECTORS OF FARMERS' INSTITUTES.

We give below a few extracts from "Rules and Regulations Governing Farmers' Institutes." The great majority of directors have read the complete rules and regulations. We believe, however, that it is well to draw the attention of such, together with new directors, to some of the more important features in connection therewith. If copies of the complete "Act—Rules and Regulations," are desired, we shall be glad to furnish the same upon application.

Extracts from "Rules and Regulations."

The object of each local institute shall be the dissemination of agricultural knowledge in its District and the development of local talent. The officers shall endeavor to bring the rank and file of the farmers into touch with the successful local men, that the masses may become more conversant with the best and most profitable methods of farming, stock raising, dairying, fruit culture, and all branches of business connected with the industry of agriculture.

All memberships shall terminate the 31st of December of each year.

The Institute year shall begin June 1st and end May 31st.

All Institutes organized under the Act shall be strictly non-partizan and non-sectarian in every phase of their work, and no Institute shall be operated in the interest of any party, sect or society, but for the equal good of all citizens and the farming community.

No subject shall be presented at an Institute meeting, or discussion allowed, of a political or sectarian nature; nor shall any speaker be allowed in his lecture, essay, or speech, or in any discussion, to advertise wares or

schemes in which he has a direct or indirect pecuniary interest. The delegates and officers of the Institute shall see that the exercises are not subordinated to any low or frivolous entertainments or to the aggrandizement of any individual, party, or sect.

A copy of each poster and each programme shall be sent as soon as published to the Superintendent, and to each speaker advertised.

The time allowed speakers should be from five to thirty minutes, to vary according to the subject and the ability of the speaker. It is no breach of courtesy to limit each speaker to the time allotted him in the programme. When the programme has been carefully prepared on that basis, no speaker should be allowed to exceed the time, to the embarrassment or detriment of the speakers who are to follow him. If speakers are held down to their time, the work of the Institute, as a rule, will be found benefited. Sections should not be too long.

No one should be named on a programme who has not agreed to do the specific thing he is advertised to do.

The board of directors, under these Rules and Regulations, shall have full control of the affairs of the Institute. They shall arrange time and places of meetings when not otherwise arranged for, and shall outline the work and policy of the Institute.

The executive shall carry into effect the plan of work decided upon by the board of directors and shall arrange the details of the same. (See clauses 9 and 6).

A meeting of the directors or of the executive may be held at any time, provided one week's notice by letter be given to each director, in the case of a directors' meeting; and a similar notice to each executive officer in case of an executive meeting. Meetings of the executive officers or of the directors may be held on shorter notice, provided each director or executive officer be otherwise notified and agrees thereto. (See clause 25.)

Each municipality in the district shall be divided annually between the directors representing the same, whose duty it shall be to make a thorough canvass for members each year. This division of territory shall be arranged at a directors' meeting held immediately after the close of the annual meeting.

As soon as it is decided to hold an Institute meeting in a municipality, the directors elected to represent that municipality shall form part of the executive committee, until after the close of said meeting. The duties of the said directors shall be to assist (to the best of their ability) the other members of the executive, to the end that a successful meeting may be held in their municipality.

It shall be the duty of the officers and directors to be present at the meetings of the Institute. An officer or director who has not during the current year attended the meeting held in his municipality (except when prevented by sickness), or otherwise rendered valuable assistance to the Institute, shall not be eligible for re-election to office for the ensuing year.

Each member of an Institute shall be entitled to receive a copy of such publications as the following, issued by the Department of Agriculture for the Province of Ontario:

Report of the Ontario Agricultural College and Experimental Farm.

Report of the Ontario Agricultural and Experimental Union.

Report of the Dairymen's Associations of Eastern and Western Ontario.

Report of the Superintendent of Farmers' Institutes. Part 21.

Report of the Live Stock Association, which includes, Cattle, Sheep, Horse and Swine Breeders, Poultry Associations, and Winter Fairs.

Bulletins of the Agricultural College and Experimental Farm.

BULLETINS—SPECIAL.

Any change of address or any failure to receive the bulletins and reports issued by the Agricultural Department should be reported immediately to the Superintendent.

The names of all officers and directors shall be included in the list of members.

In order to increase the membership and interest, each district should be canvassed annually by the local directors. In order to meet the expenses of each director so engaged, a commission of 25 per cent. may be allowed on each subscription taken by him in the section of the township he represents.

Some institutes have found it profitable to put advertising on the back of programmes. Not less than one dollar per inch should be charged for advertising on back of programme when the edition numbers 500, *i.e.*, a programme 10 inches long and 500 in number should net the institute $10 if sold to advertisers. If the number of programmes is more than 500 or less than 500, the price per inch should be proportionate. Never accept advertising from any but reliable parties, making or selling first-class goods or stock.

When an officer or member is canvassing for members, each should take with him a complete set of the publications sent free to members during the past year. By showing these or the ones the persons canvassed is most likely to be interested in, many more subscriptions can be obtained. These will be furnished upon application.

Each person becoming a member should be given an annual membership ticket or badge, the latter preferred. When badges are used each member should be requested to wear same whenever he or she attends Institute meetings. This will tend to advertise the Institute, and will make more easy and effectual the work of these selected to canvass the meeting.

Delegates and officers are urged to do all they can, by the use of the *Question Drawer* and otherwise, to draw out in discussion as many as possible of those present. Call upon them personally and urge them to speak. Frequently those best qualified are least inclined to take part. Try in each case to make the discussion interesting by engaging some experienced man to follow each address and thus open the discussion. Do not allow one or two to monopolize the discussion, but make all feel that they have a part in the proceedings.

Let it constantly be borne in mnd that one of the chief aims of the Institute work is the development of local talent and the bringing of the rank and file into close touch with the most successful local men and their methods. Do not depend altogether on the delegates: if home talent is not developed the chief benefit of the Institute system is lost sight of. When a popular evening programme is desirable (which is the case in many places) it should be entirely supplied by local talent. In every county in Ontario there are many young persons who could be employed to assist in such meetings, and if so engaged, would, in all probability, thereafter take a keener interest in the work of Farmers' Institutes. Business and professionl men and their families should not only be cordially invited to take part in these meetings and help to make them a success, but they should be urged to do so. It is reasonable to expect their assistance, for the success of all classes depends on the farmer; where he is prosperous all other classes flourish.

OFFICERS FOR 1908-09.

Institute.		*Name.*	*P.O. Address.*
Addington	President	Smith Gilmour	Tamworth
	Vice-President	Matthew Shannon	Centreville.
	Sec.-Treas	J. B. Aylesworth	Newburgh.
Algoma, C	President	Henry Knight, Jr	Sault Ste. Marie.
	Vice-President	Robert Parr	Korah.
	Sec.-Treas	Geo. H. Farmer	Steelton.
Algoma E	President	Wm. Yates	Goldenburg.
	Vice-President	John Warnock	Iron Bridge.
	Sec.-Treas	Thomas Cordukes	Sowerby.
Algoma N. Shore	President	Carson Moore	MacLennan.
	Vice-President	R. H. Barr	MacLennan.
	Sec.-Treas	James Nott	MacLennan.
Amherst Is	President	H. Filson	Stella.
	Vice-President	R. Kilpatrick	Stella.
	Sec.-Treas	W. P. Tugwell	Stella.
Brant, N.	President	James Pate	Brantford.
	Vice-President	W. C. Good	Brantford.
	Sec.-Treas	J. W. Clark	Cainsville.
	Assist.-Sec	A. W. VanSickle	Onondaga.
Brant, S	President	J. H. Wooley	Burford.
	Vice-President	H. Gammon	Mohawk.
	Sec.-Treas	F. M. Lewis	Burford.
Brockville	President	Wm. Stafford	Lyn.
	Vice-President	George Brown	Lyn.
	Sec.-Treas	W. H. MacNish	Lyn.
Bruce, C	President	W. R. McDonald	Ripley.
	Vice-President	J. L. Bowers	Ripley.
	Sec.-Treas	R. J. Nelson	Paisley.
Bruce, N	President	J. K. Livingstone	Hepworth.
	Vice-President	Wm. Laidlaw	Lion's Head.
	Sec.-Treas	Cecil Swale	Wiarton.
Bruce, S	President	W. H. Arkell	Teeswater.
	Vice-President	W. A. Rowand	Walkerton.
	Sec.-Treas	Jas. A. Lamb	Walkerton.
Bruce, W	President	Allen McKinnon	Port Elgin.
	1st Vice-President	Gilbert Johnston	Underwood.
	2nd Vice-President	John Atkinson	Allenford.
	Sec.-Treas	J. H. Wismer	Port Elgin.
Carleton	President	J. E. Caldwell	City View.
	Vice-President	Wesley Graham	North Gower.
	Sec.-Treas	R. H. Grant	Hazeldean.
Dufferin	President	George Best	Whitfield.
	Vice-President	W. J. Dynes	Granger.
	Sec.-Treas	Wm. Shields	Shelburne.
Dundas	President	A. Kennedy	Winchester.
	Vice-President	H. G. Whittaker	Williamsburg.
	Sec.-Treas	J. P. Fox	Winchester.
Durham, E	President	J. Arthur Vance	Ida.
	Vice-President	W. R. N. Sharpe	Ida.
	Sec.-Treas	A. J. Fallis	Millbrook.
Durham, W	President	Thomas Baker	Solina.
	Vice-President	A. W. Annis	Tyrone.
	Sec.-Treas	H. C. Hoar	Hampton.
Elgin, E	President	James A. Shepphard	Mt. Salem.
	Vice-President	Lewis Cloes	New Sarum.
	Sec.-Treas	F. Leeson	Alymer.
Elgin, W.	President	A. A. Miller	Middlemarch.
	Vice-President	D. Carmichael	West Lorne.
	Sec.-Treas	Arch. Maccoll	Aldboro.

OFFICERS FOR 1908-09.—*Continued*

Institute.		*Name.*	*P.O. Address.*
Essex, N	President	James Hedrick	S. Woodslee.
	Vice-President	R. W. Kinister	Ruscom.
	Sec.-Treas	D. Ure	Windsor.
Essex, S	President	Philip C. Fox	Leamington.
	Vice-President	L. C. Palmer	Kingsville.
	Sec.-Treas	G. W. Coatsworth	Kingsville.
Frontenac	President	Byron Gordon	Glenvale.
	Vice-President	Michael Traves	Latimer.
	Sec.-Treas	Joshua Knight	Elginburg.
Frontenac, C	President	John Campbell	Cole Lake.
	Vice-President	Henry Drew	Longlake.
	Sec.-Treas	R. A. Hamilton	Godfrey.
Glengarry	President	A. A. McLennan	Lancaster.
	1st Vice-President	R. R. Hunter	Maxville.
	2nd Vice-President	D. J. Robertson	Martintown.
	Sec.-Treas	J. P. McNaughton	Dominionville.
Grenville, S	President	Henry Morgatroid	Brouseville.
	Vice-President	R. Connell	Roebuck.
	Sec.-Treas	G. W. Carson	Charleville.
Grey, C	President	H. Guy	Maxwell.
	Vice-President	J. R. Fawcett	Kimberly.
	Sec.-Treas	J. I. Graham	Vandeleur.
Grey, N	President	M. Rutherford	Leith.
	Vice-President	William Bunt	Kemble.
	Sec.-Treas	A. S. Donald	Kilsyth.
Grey, S	President	Daniel Edge	Edge Hill.
	Vice-President	John R. Philp	Maple Lane.
	Sec.-Treas	Geo. Binnie	Bunessan.
Haldimand	President	F. D. Awde	Cheapside.
	Vice-President	Jas. R. Sutor	Bingham Road.
	Sec.-Treas	W. S. Dunnett	Clanbrassil.
Halton	President	M. Dice	Milton.
	Vice-President	J. Reid	Campbellville.
	Sec-Treas	E. F. Nixon	Ashgrove.
Hastings, E	President	J. C. Sheffield	Gilead.
	Vice-President	J. H. Clare	Chapman.
	Sec.-Treas	H. C. Emerson	Corbyville.
Hastings, N	President	Richard Keene	Hazard's Corners.
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	Sec.-Treas	F. A. Comerford	Eldorado.
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	Vice-President	A. S. White	Sidney Crossing.
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Huron, E	President	Thomas McMillan	Seaforth.
	Vice-President	W. H. Fraser	Bluevale.
	Sec.-Treas	P. A. McArthur	Brussels.
Huron, S	President	W. D. Saunders	Exeter.
	Vice-President	William Monteith	Thames Road.
	Sec.-Treas	B. S. Phillips	Exeter.
Huron, W	President	H J. Morris	Loyal.
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	Vice-President	John Buchanan	Florence.
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Kent, W	President	Arthur Fisher	Chatham.
	Vice-President	Harvey Imrie	Renwick.
	Sec.-Treas	J. R. Longmoore	Chatham.
Lambton, E	President	Charles Hawkins	Warwick.
	Vice-President	John Forbes	Kerton.
	Sec.-Treas	Thos. A. Martin	Forest.

OFFICERS FOR 1908-09.—*Continued.*

Institute.		*Name.*	*P.O. Address.*
Lambton, W	President	William Jackson	Osborne.
	Vice-President	Frank C. Pretty	Wilkesport.
	Sec.-Treas	Frank Young	Ladysmith.
Lanark, N	President	William Dunlop	McDonald's Cors.
	Vice-President	A. Rankin	Middleville.
	Sec.-Treas	Robert Harper	McDonald's Cors
Lanark, S	President	J. W. Leaver	Perth.
	Vice-President	James Glien	Perth.
	Sec.-Treas	George Oliver	Perth.
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	Vice-President	F. F. Bishop	Bishop's Mills.
	Sec.-Treas	G. T. Telford	Merrickville.
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	Vice-President	C. F. Rath	Lansdowne.
	Sec.-Treas	Freeman Britton	Gananoque.
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	Vice-President	T. B. Lund	Napanee.
	Secretary	D. Aylesworth	Bath.
	Treasurer	W. N. Dollar	Napanee.
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	Vice-President	H. Ussher	Queenston.
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	Vice-President		
	Sec.-Treas	A. J. Wagg	Mindemoya.
Manitoulin, W	President	Fred Smith	Gore Bay.
	Vice-President		
	Sec.-Treas	And. Hall	Gore Bay.
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	Vice-President	T. H. Shore	Glamworth.
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	Vice-President	D. A. Graham	Ivan.
	Sec.-Treas	W. T. Amos	Lieury.
Middlesex, W	President	J. G. Lethbridge	Alliance.
	Vice-President	Hugh McCallum	Walkers.
	Sec.-Treas	Chas. M. Macfie	Appin.
Monck	President	R. B. Fitzgerald	Fenwick.
	Vice-President	J. N. Paget	Canboro.
	Sec.-Treas	J. E. Cohoe	Wellandport.
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	Vice-President	E. Hamilton	Raymoud.
	Sec.-Treas	J. H. Osborne	Utterson.
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	Vice-President	J. W. Fletcher	Ravenscliff.
	Sec.-Treas	Wm. Clarke	Box 3 Huntsville.
Muskoka, S	President	W. C. Denniss	Bracebridge.
	Vice-President	J. J. Beaumont	Bracebridge.
	Sec.-Treas	Alex. Barron	Bracebridge.
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	Vice-President	Chas. H. Davidson	Brackenrig.
	Sec.-Treas	Albert Harvey	Port Carling.
Nipissing, W	President	Onesime Larveque	North Bay.
	Vice-President	A. Limoges	Limoges.
	Sec.-Treas	W. J. Simmins	Feronia.
Norfolk, N	President	S. C. Kitchen	Bloomsburg.
	1st Vice-President	L. C. McConnell	Delhi.
	Sec.-Treas	A. Swinn	Guysboro.
Norfolk, S	President	Jas. Symington	Port Dover.
	Vice-President	Jno. Pow	Vittoria.
	Sec.-Treas	N. S. Palmerton	Walsh.
Northumberland, E	President	Walter Adams	Wooler.
	Vice-President	J. N. Stone	Norham.
	Sec.-Treas	R. O. Morrow	Hilton.

OFFICERS FOR 1908-09.—*Continued.*

Institute.		*Name.*	*P.O. Address.*
Northumberland, W.	President	W. J. Westington	Plainville.
	Vice-President	Thos. Hoskin	The Gully.
	Sec.-Treas.	R. Cullis	Camborne.
Ontario N.	President	Wm. Shier	Sunderland.
	Vice-President	Asa Millard	Uxbridge.
	Sec.-Treas.	J. W. Widdifield	Uxbridge.
Ontario, S.	President	T. Manderson	Myrtle Sta.
	Vice-President	Wm. Ratcliffe	Columbus.
	Sec.-Treas.	Elmer Lick	Oshawa.
Oxford, N.	President	Jas. H. King	Hickson.
	1st Vice-President	W. E. Thompson	Woodstock.
	2nd Vice-Presiden.	Herman Bollert	Cassel.
	Sec.-Treas.	F. W. Goble	Woodstock.
Oxford, S.	President	J. H. Forden	Beachville.
	Vice-President	R. W. Hawkins	Brownsville.
	Sec.-Treas.	W. R. Carroll	Norwich.
Parry Sound, E.	President	W. H. Silvester	Burk's Falls.
	Vice-President	E. Gough	Powassan.
	Sec.-Treas.	T. Bottomley	South River.
Parry Sound, W.	President	Jas. E. Taylor	McKellar.
	Vice-President	A. D. Badger	James Bay Junct.
	Sec.-Treas.	W. J. Jones	Parry Sound.
Peel	President	J. C. McArthur	Rockside.
	1st Vice-President	E. E. Wilson	Caledon.
	2nd Vice-President	P. A. Campbell	Campbell's Cross.
	Sec.-Treas.	W. E. Shean	Elmbank.
Perth, N.	President	Jno. Munro	Milverton.
	Vice-President	James Hamilton	Milverton.
	Sec.-Treas.	S. H. Pugh	Milverton.
Perth, S.	President	Luther W. F. Turner	Carlingford.
	Vice-President	James More	Kirkton.
	Sec.-Treas.	Duncan MacVannel	St. Mary's.
Peterboro, E.	President	F. Birdsall	Birdsall.
	Vice-President	E. Hawthorne	Warsaw.
	Sec.-Treas.	Chas. O'Reilly	Norwood.
Peterboro, W.	President	J. N. Telford	Bridgenorth.
	Vice-President	J. H. Garbutt	Peterboro, Box 921.
	Sec.-Treas.	Wm. Collins, 242 Romaine St.	Peterboro.
Prescott	President	Denis Hurley	Yankleek Hill.
	Vice-President	Angus Mckenzie	Yankleek Hill.
	Sec.-Treas.	W. Macadam	Yankleek Hill.
Prince Edward.	President	J. W. Hyatt	West Lake.
	Vice-President	W. B. Leavens	Chisholm.
	Sec.-Treas.	W. A. Christy	Bloomfield.
Rainy River, S.	President	Geo. Strachen	Box Alder.
	Vice-President	D. Allan	Emo.
	Sec.-Treas.	T. A. Boucher	Emo.
Renfrew, N.	President	A. F. Cameron	Beachburg.
	Vice-President	Arch. Crozier	Beachburg.
	Sec.-Treas.	Jno. Brown	Beachburg.
Renfrew, S.	President	D. Muirhead	Renfrew.
	Vice-President	D. Barr, Sr.	Renfrew.
	Sec.-Treas.	G. MacIntyre	Renfrew.
Russell	President	W. C. Edwards (Hon.)	Rockland.
	1st Vice-President	D. McDonald	Pana.
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Simcoe, C.	President	Jno. Anderson	Crossland.
	Vice-President	C. M. Hickling	Barrie.
	Sec.-Treas.	Wm. Pratt	Penetanguishene.
Simcoe, E.	President	J. S. Wilson	Price's Cors.
	Vice-President	Jno. Wiggins	Guthrie.
	Sec.-Treas.	R. C. Hipwell	Orillia.

OFFICERS FOR 1908-09.—*Continued.*

Institute.		*Name.*	*P.O. Address.*
Simcoe, S.	President	J. A. Kidd	Cookstown.
	Vice-President	T. S. Graham	Newton Robinson.
	Sec.-Treas	Ed. Jeffs	Bond Head.
Simcoe, W.	President	David Smith	Smithdale.
	Vice-President	John Smith	Duntroon.
	Sec.-Treas.	J. A. McDermid	Stayner, Box 164.
St. Joseph Is.	President	Wm. Dunn	Marksville.
	Vice-President	John Fyfe	Richard's Ldg.
	Sec.-Treas.	C. A. Young	Richard's Ldg.
Stormont	President	Isaiah McBride	Northfield Station.
	Vice-President	W. A. Morgan	Aultsville.
	Sec.-Treas.	D. H. McDiarmid	Avonmore.
Temiscamingue	President		
	Vice-President		
	Sec.-Treas.	John Sharp	New Liskeard.
Victoria, E.	President	W. H. Cullis	Powles' Corners.
	Vice-President	Isaac H. Fee	Mt. Pleasant.
	Sec.-Treas.	Wm. Thurston	Bobcaygeon.
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	Sec.-Treas.	Jas. Keith	Lindsay.
Waterloo, N.	President	A. Doering	Crosshill.
	1st Vice-President	Josiah Stauffer	Waterloo.
	2nd Vice-President	M. L. Webber	St. Jacobs.
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Waterloo, S.	President	W. C. Shaw	Hespeler.
	1st Vice-President	S. S. Herner	Mannheim.
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	Secretary	Wm. Slater	Galt.
	Ass't. Secretary	C. D. Brown	Haysville.
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	Vice-President	W. Marshall	Crowland.
	Sec.-Treas.	W. H. Gainer	Welland.
Wellington, C.	President	Thos. Dearing	Orton.
	Vice-President	Wm. Thacker	Ponsonby.
	Sec.-Treas.	Geo. Wright	Elora.
Wellington, E.	President	Alfred Hutchinson	Mt. Forest.
	Vice-President	J. P. Beer	Arthur.
	Sec.-Treas.	C. S. Nicholson	Mt. Forest.
Wellington, S.	President	Jno. Barber	Guelph.
	1st Vice-President	Samuel Young	Guelph.
	2nd Vice-President	J. A. Cockburn	Aberfoyle.
	Sec -Treas.	G. B. Hood	Guelph.
Wellington, W.	President	J. F. Philp	Rothsay.
	Vice-President	H. Fairweather	Alma.
	Sec.-Treas.	S. M. Clemens	Drayton.
Union	President	Alex. Drummond	Clifford.
	Vice-President	Jno. Pritchard	Rodgrave.
	Sec.-Treas.	David Campbell	Clifford.
Wentworth, N.	President	Jas. A. Gray	Freelton.
	1st Vice-President	Wm. Drummond	Waterdown.
	2nd Vice-President	Ross Shaver	Westover.
	Sec.-Treas.	Alfred Purnell	Puslinch.
Wentworth, S.	President	J. H. McNeilly	Stoney Creek.
	Vice-President	Elmer Dyment	Copetown.
	Sec.-Treas.	Erland Lee	Stoney Creek.
York, E.	President	Geo. Robins	Malvern.
	Vice-President	Geo. Robinson	Markham.
	Sec.-Treas.	A. J. Reynolds.	Scarboro Jct.
York, N.	President	Arch. McCallum	King.
	Vice-President	Thos. J. Spaulding	Aurora.
	Sec.-Treas.	Simeon Lemon	Kettleby.
York, W.	President	A. E. Mercer	Islington.
	Vice-President	Thos. Griffith	Weston.
	Sec.-Treas.	R. L. Crawford	Emery.

ANNUAL REPORT

OF THE

FARMERS' INSTITUTES

OF THE

PROVINCE OF ONTARIO

1908

APPENDIX—FARMERS' INSTITUTE CLUBS

(PUBLISHED BY THE ONTARIO DEPARTMENT OF AGRICULTURE, TORONTO.)

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1908

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Appendix to the Report of Farmers' Institutes

OF THE PROVINCE OF ONTARIO.

Farmers' Institute Clubs;—Objects, Methods of Organization, Recommendations for Work, Etc.

To the Honorable, the Minister of Agriculture:—

Dear Sir,—I have pleasure in presenting herewith a brief statement as to the benefits to be derived from the establishment of local clubs by the farmers of Ontario for the purpose of carrying on work as outlined in this volume. A number of these clubs have already been formed, and the farmers in many districts are enquiring for information as to methods of organization, lines of work to be taken up, etc. We trust and believe that this line of work will appeal very strongly to the farmers of the Province, and will prove a strong adjunct to the regular work of the Farmers' Institutes. Such work cannot but result in much benefit to those who take an active interest in it.

I have the honor to be,
Sir,
Your obedient servant,

G. A. PUTNAM,
Superintendent.

Parliament Buildings,
Toronto.

FARMERS' INSTITUTE CLUBS.

The markedly beneficial results both to the individual and to the community, following the organization of farmers for the purpose of studying, discussing and debating agricultural problems, and improving themselves in a literary and social way, at a number of places throughout the Province, years ago, even before Farmers' Institutes were organized, and the benefits resulting from the work of similar societies formed within the past few years, gives us assurance in bringing the question of Farmers' Institute Clubs prominently to the notice of the farmers of Ontario. The Department of Agriculture is much gratified to learn from various sources of the success attending the work of these Clubs in many sections of the Province, and we believe that the good work being done by the Farmers' Institutes of the Province can be strengthened very materially by local organizations in those neighborhoods when even a small number of interested and enthusiastic farmers will band themselves together for the purpose of studying the possibilities of agriculture in their respective localities.

Institute delegates, and others who have had the opportunity of observing, have commented, time and again, upon the high degree of intelligence, and the up-to-date methods in those districts where opportunities have been afforded for the holding of periodical meetings for the purpose of discussing

matters bearing upon the work of the farm. Many of the present day leaders in the agriculture of the Province are men who attribute much of their success to the early opportunities afforded through literary and debating societies and clubs organized for the study of agricultural matters, and the comparing of notes with their neighbour farmers.

It is gratifying to note the spirit of inquiry among the farmers throughout the Province. The farmer who produces milk is now showing a desire to know as to whether or not the individual cows in his herd are being kept at a profit, how his herd can be improved, if he is receiving his just share of the price paid by the consumer for the milk, butter or cheese purchased in the retail store; the fruitmen are fast adopting those methods of cultivation, spraying, packing, etc., which will insure them the greatest production and the highest prices; and the tillers of the soil generally are awakening to the fact that they must proceed on business lines and apply scientific principles if they are to receive just returns on the capital invested and for their toil. We believe that many are ready for the formation of organizations through which they will be the better prepared to improve their stock of agricultural knowledge, and to lend greater attractiveness to their farming operations.

There are usually a small percentage of farmers in each locality who are producing a superior quality of roots, grain or fruit, and who are practising successful methods in cultivation, feeding, breeding of live stock, milk production, etc. If the methods followed by these successful men were more generally known, a greater number of the farmers in the vicinity would adopt similar methods. Then again, many farmers who consider the products which they are raising from year to year, of superior quality, would, if they had the opportunity of comparing notes with their neighbor farmers, find many ways and means of improving upon their present methods, and thus secure even better results and increased profits. We wish to afford the farmers a means whereby they will have an opportunity to make the best application of the great fund of agricultural literature which is within the reach of all, to utilize to best advantage the services of lecturers sent out from the Department of Agriculture from time to time, to exchange views on the results of methods adopted by the farmers of the locality: in short, to furnish a means whereby the farmers will have a systematic and attractive method of studying their own business in their own way.

The work of the Clubs, so far as agriculture is concerned, need not, and should not be confined to a discussion of methods for increasing the amount of produce per acre, the more economical feeding of animals, etc., but should also include co-operation among the producers of the district in the matter of purchasing supplies, and in the production and selling of grain, roots, fruit, live stock and other farm produce.

We believe that in Farmers' Institute Clubs will be found the opportunity for self-improvement, for the farmers of Ontario, which cannot be secured in any other way. It is at once a simple and effective means to a desired end, and at comparatively no cost to those reaping the benefits. It is a means by which the information which is now placed in the hands of the farmers through the reports and bulletins of the Department, and the standard agricultural papers of the Province, as well as the leading weeklies, may be utilized to the best advantage.

It must be remembered that the degree of success attending this work will depend almost entirely upon the efforts of local men, successful farmers who have enthusiasm and ability, and who are willing to devote time to the work should be placed in office. Arrangements should be made at each meeting for definite subjects to be dealt with at the following meeting, or

what is better, a program of topics with speakers prepared some months in advance.

Organization.

The directors of Institutes and others who receive a copy of this booklet, are asked to place the matter before their neighbor farmers, and if thought desirable, plan to organize at the next Farmers' Institute meeting to be held in the locality, or to call a special meeting for the purpose of organization. It would be well for directors in each locality to consult as to when and where the organization meeting could be held. We advise those who become interested in this movement to communicate with the secretary of the district Farmers' Institute regarding organization, and make arrangements for an organization meeting, either at the time of the regular Farmers' Institute meeting or at some other date. Directors and others are also requested to write direct to the Superintendent of Farmers' Institutes for further particulars and assistance. Young men who are desirous of doing a real service to a community, both from a financial and social standpoint, cannot do better than organize a Farmers' Institute Club.

FARMERS' INSTITUTE CLUBS.

Suggested Constitution and By-laws.

Preamble.

Object. The object of this organization shall be to encourage and maintain a deeper and more general and intelligent interest in all that pertains to agriculture in the broadest sense, by holding meetings at which farmers may receive and give information, suggestions and experiences, and study together how best to improve themselves and to help their fellow farmers; also to afford an opportunity for debate and study to its members that they may thus become accustomed to public speaking and help to develop talent along those lines that might otherwise remain dormant; to have them present addresses upon subjects relating to farming and dealing specially with the conditions existing in the locality; to increase the knowledge of and interest in the larger questions (not sectarian or political) of the nation, and which affect the social life and financial position of the farmer; to create and stimulate an ambition in our farmers, and especially the younger men, to be successful in the truest sense, and to not only raise the calling of the farmer to the place it should occupy in keeping with its importance to the state, but also to make use of his successes, opportunities and power, to make Ontario a still more desirable Province to live in.

CONSTITUTION.

Article I.— Officers.

Section 1.—(*a*) The *officers* shall consist of President, Vice-President, Secretary-Treasurer, two or more Directors and two Auditors.

(*b*) The *Executive* shall consist of President, Vice-President, and Secretary-Treasurer. (Quorum, 2).

(*c*) The Board of Directors shall consist of all officers except the Auditors. (Quorum, 3).

(*d*) Committee may be appointed at the organization meeting, at a regular meeting of the Club, or by the Board of Directors, to take charge of such work as may be designated by the members of the society—Program Committee, Lookout Committee, Experiment Committee, Live Stock Committee, Seed and Weed Committee, Farm Utensil Committee, etc.

Duties of Officers.

Section 2.—Their duties shall consist of such as usually appertain to similar offices in other societies. (See pages to for suggestions).

Time of Election and Term of Service.

Section 3.—Officers shall be elected annually at the first meeting held after October 1st, and shall serve until their successors have been elected.

How Elected.

Section 4.—Officers shall be elected either by ordinary vote or by ballot, according to the desire of those in attendance.

Article II.—Membership.

Section 1.—Only persons engaged in agricultural pursuits or directly connected with agriculture in some other way, shall be eligible for membership.

The membership fee shall be ..... (10 to 25 cents) per annum and such further assessments as may be decided upon from time to time by a two-thirds vote of the whole membership. Non-payment of assessment will result in cancellation of membership.

Those who wish to become members of the Farmers' Institute for the riding must pay the regular fee, 25 cents, to the secretary for the riding. It is advised that only one member of each family join the riding Institute. Membership fee to the local Club is therefore distinct from membership in the District Institute.

Only those Clubs which have twenty-five members, twelve of whom also belong to the riding Institute, will be entitled to assistance at a special meeting, from the Department of Agriculture.

BY-LAWS.

Place of Meeting.

Section 1.—The Club shall meet at least five times a year at such time and place as decided upon by the Board of Directors, or by those in attendance at the annual meeting.

Order of Business.

Section 2.—Within thirty minutes after the hour announced for each meeting, the presiding officer shall call the Club to order, and the following order of exercises shall be observed:—

1. Reading and approving minutes of last meeting.
2. Unfinished business.
3. Report of Committees.
4. Irregular or new business.
5. Regular program.

SUGGESTED PROCEDURE AT ORGANIZATION MEETING FOR FARMERS' INSTITUTE CLUB.

At the appointed hour some one active in the calling of the meeting, (if one of the officers of the riding Farmers' Institute is present, it would be well for his to so act), shall ask for the appointment of a chairman for the occasion. The chairman shall then ask for the appointment of a secretary, and shall either explain the purpose of the meeting, or call upon some other person or persons to do so.

If the meeting is in favor of organization, it is then in order to adopt a constitution and set of by-laws. Only those who intend to become members should take part in the adoption of constitution and by-laws.

It would be well to adopt the constitution and by-laws as suggested in this booklet, unless there is good reason for amending them. After the motion for the adoption of the constitution and by-laws is seconded, the chairman shall ask for amendments or other changes. If any are received, the constitution and by-laws shall be voted upon, clause by clause, such changes being made as meet with the approval of the meeting. When no further amendments are forthcoming, the by-laws as amended shall be passed as a whole. When no amendments are presented, the original motion shall be voted upon.

It shall next be in order to have those present and who join the Club, sign the constitution and by-laws, which signing makes them chartered members. The members shall then proceed with the business arising out of the constitution and by-laws:—

1. Election of president, vice-president, secretary-treasurer and executive committee.

2. Decide upon date and place of next meeting.

3. Decide upon a system of holding the meetings:—Frequency; shall they be monthly, bi-monthly or otherwise? Shall they continue throughout the year? Once or twice a month from October to April inclusive, and a certain day of the week, say, the second and fourth Tuesday of the month, or whatever intervals would best suit the members, is advised. It would be well to always hold the meetings in the one place, in some central location, if this is possible; but if such arrangement is not convenient, some other method must be adopted, such as holding the meetings in the different halls or school-houses in the section, or from house to house among the farmers.

4.—(*a*) Program:—Subject, speakers and persons to lead in the discussions for the next meeting.

(*b*) Arrangements for subsequent meetings, so far as possible.

DUTIES OF OFFICERS.

PRESIDENT.—It is the duty of the president to preside at all meetings, to announce business, to preserve order, to put motions to vote, to announce results, and also to see that at the meetings of the Club, parliamentary usage be observed, and to generally supervise the work of the Club. The president shall not make or second motions while in the chair. When a motion is made relating to the chair, the mover or seconder should put the motion to vote. The chairman shall decide all points of order, subject to appeal. He shall endeavor to make the Club as great a success and of as much benefit to the people as possible.

Vice-President.—It is the duty of the vice-president to preside in the absence of the president; in the absence of the president and vice-president a chairman shall be elected by the meeting. If the president leaves the locality, it shall be the duty of the vice-president to look after the duties which fall upon the president.

Secretary-Treasurer It shall be the duty of this officer to keep such a record of the proceedings of the meetings as will enable any intelligent person to understand fully the nature and doings of the meetings. He should record in the minutes all motions, whether carried or lost. He shall record the programs of the meetings fully, especially when they have proven of particular interest, and should, if possible, obtain from the speakers copies of their addresses for file.

It shall also be the duty of the secretary-treasurer to read minutes, correspondence, etc., when they are called for, to call the roll, to notify committees of their appointment and the business referred to them. He shall collect all the moneys due the society, and shall keep accurate account of all receipts and expenditures and report the same to the Club. He should pay out money, except for ordinary expenses, only by order of the executive, having such signed by the president. Receipts should be secured for all payments of one dollar or more. The secretary of the Club shall be required to report, upon forms to be supplied, the attendance, speakers, etc., to the Superintendent of Farmers' Institutes within two weeks after a meeting has been held. It shall also be the duty of this officer to do all the correspondence of the society.

The records may be kept in an ordinary blank minute book. A portion of the book should be devoted to each of the following:—(*a*) Minutes of regular and executive meetings; (*b*) Cash account; (*c*) Lists of members.

The Executive shall have power to deal with all matters of business in connection with the Club, and shall be held responsible for carrying into effect the plans of work decided upon at the regular meetings of the club, and by the Board of Directors, and shall arrange the details of the same.

The Board of Directors shall have general charge of the affairs of the Club and give such directions to the executive and committees as are in accord with the wishes of the membership in general.

Special Committees. Each committee shall perform the duties assigned it, and the chairman shall report to the Executive, Board of Directors, or at a regular meeting, when called upon to do so by the president. Each committee shall elect its chairman. It is well to have one of the executive on each committee.

MEETINGS.

It is desirable to hold meetings at least once a month; and where there are a number of members prepared to give addresses and papers, it might be that good meetings could be held as often as once every two weeks. Experience has shown, however, that it is much better to hold four or five good meetings during the first year of the Institute Club rather than to hold a greater number and have them of less interest and profit. If you give the farmers something of value and deep interest once a month, you are more likely to secure and maintain their interest and co-operation, than by giving them inferior service every week or two weeks.

The Rules and Regulations governing Farmers' Institutes state that "party politics in any form must be avoided by the speakers." "The object of each local Institute shall be the dissemination of agricultural knowledge in its district, and the development of local talent." When a representative

of the Department is in attendance, discussions or addresses of a racial, sectarian or political nature must be avoided, and we would advise the officers of local clubs not to introduce questions of this nature at their regular meetings. There are plenty of questions bearing directly upon their calling which can be discussed without entering the political or religious field.

Special Inducements to Farmers' Institute Clubs. Those Clubs which hold at least five meetings a year and report the same to the Superintendent of Institutes, and which have at least twenty-five members, twelve of whom also belong to the riding Farmers' Institute, will be entitled to a speaker furnished by the Department of Agriculture for a special meeting once a year, free of cost to the Club, except for transportation to and from the nearest railway station, and entertainment while at the place of meeting. The Department will make arrangements direct with the secretaries of the Clubs concerned for dates, speakers and subjects. The Clubs will no doubt be able to get speakers through the Farmers' Institute for the riding for a meeting to be included in the regular series of winter Institute meetings.

It sometimes occurs that the Department has a special publication of value to farmers, but not in sufficient numbers to send to all members of the Farmers' Institute. The Clubs will be given preference in the distribution of such literature. If a Club is doing valuable work for the farmers of the surrounding district, the Department may be depended upon to give liberal assistance by way of sending literature and advice from time to time.

Arrangements will also be made to secure papers of general interest from the secretaries to be printed and distributed to all clubs.

SPECIAL WORK FOR FARMERS' INSTITUTE CLUBS.

In addition to the general directions given under "Objects" as to the work to be undertaken by the Clubs, we beg to make some more specific recommendations. The nature of the work to be undertaken in each locality must, of course, depend upon the lines of agriculture which are followed successfully in the locality, or which could likely be introduced with success. If dairying is one of the chief sources of revenue to the farmers, then it would be well to have a Dairy Committee. This Committee could well inquire as to whom in the vicinity were making regular tests of their cows, and make arrangements with them to present the results of their work to the Club. It would also be within the province of this committee to make some arrangement by which sires produced from ancestors of well known dairy qualities could be introduced in the neighborhood. The proper care and handling of milk, and the sanitary surroundings of stables, milkhouses, factories and creameries should receive the attention of the organization, through this committee.

Special work with reference to the breeding and care of horses, cattle, sheep, or bacon hogs should, of course, receive consideration, where any of these classes of animals are produced in anything like large quantities.

Have the Committee on Experiments canvas the members of the Club as to the experimental work which each will be prepared to take up. In this way unnecessary duplicating will be avoided, and a wider range of work undertaken. The efforts of the individual will thus be made of benefit to the whole community. The Club could with profit have one or more of its members conduct each of the experiments sent out by the Experimental Union from year to year, and the reports of those experiments would form a valuable basis for addresses and discussions the following season.

The report of the Experimental Union could well form the basis of two or three meetings. A discussion of the recommended varieties of grains, roots, corn, etc., in their application to local conditions, would form a profitable lesson for all concerned. Almost any week's issue of any one of our leading agricultural papers contains articles which could be used as a basis for addresses and discussions. The reports and bulletins sent out by the Department of Agriculture should form a basis for study and discussion.

It is not that the farmers are specially in need of additional information along agricultural lines, but that they should put into practice the information already at hand, and apply it to local conditions.

Co-operation. One of the most crying needs in agriculture is the extension of co-operation among the farmers, not only along fruit lines, but also in the production and sale of grain, stock, and other farm produce. There were between twenty-five and thirty Co-operative Fruit Associations carrying on active operations in the packing and sale of fruits throughout the past season, and the increased returns to the fruit growers concerned can be reckoned by the thousands of dollars.

In one locality in Western Ontario the farmers within a comparatively limited area, have from an initial investment of $14,000.00 reaped a benefit of $120,000.00 in five years' time, in the sale of grain alone. Surely statements like these will induce the farmers in many localities in the Province to undertake such lines of co-operation as can be made effective in their respective districts. A better quality and greater quantity of whatever is produced should be the aim of the farmers, and one of the greatest factors in bringing this about will be an intelligent co-operation. Some Clubs have purchased staple goods, such as salt, binder-twine, grass seed, machine oil, etc., for their members.

Farmers' Record. At least one Club keeps a record from month to month of the produce for sale by its members. Lists of stock and general farm produce for sale are furnished to all members, and in this way there is often a desirable interchange of stock and produce. This method also enables the farmers of the locality to sell to outsiders in large quantities at increased prices.

Interchange of Papers. Much benefit would be derived by the Clubs in each locality were they to arrange for the interchange of papers prepared by the different Clubs. The Department would be glad to get copies of what are considered the best papers of general interest, and arrange for the distribution of the same to all Clubs.

Improvement of county roads, rural telephones and many other subjects of general interest might well be dealt with by the Clubs.

Wherever there is a district representative of the Department of Agriculture, the farmers may depend upon him to assist in the Club work, for there is no better medium through which he can do effective work than through the local farmers' organizations.

Do not, in planning the work of the Club, forget to make some provision whereby the boys will be interested and benefited. If the father shows to the boy that he is anxious and willing that he should be given a voice in planning the work of the farm, and also a direct interest in some of the operations, such as testing varieties of grain, roots, corn or fruits, the testing of cows, or the feeding of stock, then the boy is sure to take a keen interest in his home life and also to render more valuable assistance in doing that work which the boy can so well do upon any well regulated farm.

What we want more and more in agriculture, is that each individual take a pride and interest in the work of the farm. There is plenty of scope

in agricultural operations, to give each boy some definite experiment or other line of work as his own, and for which he will be held directly responsible. It is to be hoped that before many years have passed, the teachers in the public schools of the Province will be able to make the application of agricultural science and practice, to the work of the school room, much more beneficial and instructive than has been the case in the past. The Clubs can do much to hasten the day when such will be the case.

We should strongly advise that the Farmers' Institute Club, and the local branch of the Women's Institute co-operate in social gatherings occasionally. In fact, it might be well for the two organizations to have union meetings every two months, or oftener if thought desirable. At these meetings more or less attention could be given to literary studies, music and debates. They should co-operate in getting up entertainments or suppers, with a view to raising funds to carry on the work.

SUGGESTED TOPICS FOR FARMERS' INSTITUTE CLUB MEETINGS.

January.

1. The most important improvement I have decided to make this year.
2. Shall we in this locality specialize in some one line, or will it be more profitable to continue mixed farming?

February.

1. Ice Cutting and Storage.
2. Value of Ice upon the Farm.
3. Winter Eggs.
4. Early Vegetables.
5. Care of Manure.
6. How can we increase the Value of our Dairy Products?
7. Co-operation—Its Advantages, and How to Co-operate.

March.

1. Growing Lambs for Profit.
2. How to Increase the Profit of the Farm.
3. Seed Selection.
4. Care of the Mother Cow.
5. The Dairy Cow.
6. Feeding of Stockers for Profit.

April.

1. Improvement of Roads.
2. Horses—Breeding and Management.
3. Special Cultivation—Conservation of Soil Moisture.
4. The Importance of Timely Work on the Farm.
5. Special Cultivation of the Orchard.
6. Value of Poultry on the Farm in your Locality.

May.

1. Horse Breeding in your Locality.
2. Troublesome Insects and How to Combat Them.
3. Farm Water Supply.
4. Hog Pasturing—Rape, etc.
5. Clover—Its Value and the Crop as a Fertilizer.
6. Cement for Buildings on the Farm.
7. The Farm, Fruit and Vegetable Garden.

June.

1. Corn Cultivation.
2. Eradication of Weeds.
3. Planting of Evergreen Trees, their Value as a Windbreak, and their Beauty.
4. Care of Mare and Colt.
5. Care of Milk for Factory and Creamery.
6. Saving Clover Hay.

July.

1. Soiling Crops.
2. Crop Rotation.
3. Drainage.
4. Packing and Keeping Fruit.

August.

1. Soiling Crops.
2. Condition of Creamery or Factory; Its Location, Sanitation and the Quality of the Product in your Factory.
3. How can we Improve Value of Straw?

September.

1. Silo—Methods of Siloing Corn, and Value of Silage.
2. Compare, if examples can be found and the year has been exceedingly dry or wet, the Yield and Condition of two Farms or Fields similarly situated, one of which had been well drained and the other has not.
3. Value of Draining.

October.

1. Value of Fall Plowing—Its Effect upon the Soil, and its Effect upon Spring Work.
2. Preparing Stables for Winter.
3. Winter Dairying.

November.

1. Winter Feeding for Beef.
2. Home Dairying.
3. Care of Poultry for Winter Eggs.
4. Shall the Boys and Girls be Kept at School and College?
5. What would Improve the Poorest Farm in the Locality?
6. What would Improve the Best Farm in the Locality?

December.

1. Value of Producing a large Quantity of High Grade Farm Products in the Locality; It Brings Better Marketing Facilities and Higher Prices.
2. Value of Trees, Ornamental and Forest.
3. Christmas Poultry.
4. Discussion of Changes made in Methods and Observed Results for the past year.

NOTE. While subjects have been suggested for the busy months of the year, we realize that many of the clubs will hold meetings only during the late fall, winter and early spring, in which case the subjects suggested for the busy months will require to be dealt with as occasion may afford.

WHAT HAS ALREADY BEEN ACCOMPLISHED BY FARMERS' INSTITUTE CLUBS.

During the series of Farmers' Institute meetings carried on in the year of 1907-08, a quiet start was made to organize at a few of the most suitable points within the Province, Farmers' Institute Clubs. A circular was issued to officers of Farmers' Institutes throughout the Province, and to speakers, making a short preliminary announcement regarding the method of organization, together with a few notes upon the value of Farmers' Institute Clubs. The speakers, in addition to the above, were supplied with some literature dealing a little more fully with the matter, showing the value that Clubs might be to the farmers of this Province if they made full use of them. In this literature, attention was called to the value of frequent meetings, and of the opportunity to discuss more fully amongst themselves the local problems which affected the farmers in any one community. Attention was also called to the opportunity that such meetings would give, to cultivate amongst the members, ability to speak in public. These features, and the others recited elsewhere in this publication, were more or less commented upon, and as a result many of the speakers and officers became deeply interested in the possibility of good results through the extension of the Farmers' Institute work into Club organization. Some sixty Clubs were organized during the winter of 1907-08. Most of these Clubs were organized in the Western Peninsula of the Province, but not a few of the very successful ones were organized in what might have been thought to have been undesirable districts because of the sparse population. Although over sixty were organized, that number did not continue with success throughout the season. The secretaries of some of these organizations lacked sufficient interest to even reply to the circular of the Superintendent, enquiring for information to lay before the Convention of Farmers' Institutes held in September. However, practically every one of the Clubs, which had officers that were interested enough to reply to the request of the Superintendent, reported that their Club was a grand success. To be precise only eight per cent. reported lack of interest. The only conclusion to draw from this would seem to be that the success of any such organization depends very largely upon the ability and aggressiveness of the officers who are chosen to manage the organization, and it is safe to say that practically every locality has plenty of such men. It requires, however, that the value of this work be placed clearly before the people that should be interested, and that they be aroused to the point of enthusiasm.

Quotations from speeches of delegates to the Farmers' Institute Convention, held September 8th and 9th, 1908, upon Farmers' Institute Clubs, and also quotations from reports of officers of Farmers' Institute Clubs, will probably give as clear and concise a knowledge as to what is being done in the movement as anything could. We quote a few such below:—

Speakers at Convention.

Mr. R. S. Hamer, of Perth, Secretary of the Perth (Lanark County) Farmers' Institute Club, and District Representative of the Provincial Department of Agriculture, believed that Clubs in connection with Institutes would be of very great assistance. His Club had been very successful, and he attributed that success to the enthusiasm of the members. He recalled the circumstances under which the Club was organized, and briefly traced its history. The officers were very carefully chosen, men of all ages, creeds, politics, but all prominent representative men in the locality, who were enthusiastic about the success of the Club. In addition he made full reports of the meetings, and had them published in the local papers. Meetings should be carefully planned, made profitable and interesting, and not held too frequently; neither should they be too long. In some cases men drove ten miles to a meeting, and it was not fair to keep them too late. They discussed live questions of general interest, such as crop rotation, care of animals, feeding, growing special crops, such as alfalfa, underdrainage, etc., and so great was the interest taken that in many cases resolutions had to be held over till a succeeding meeting. They not only discussed these questions, but resolutions were passed and forwarded to the Minister of Agriculture at Toronto, and in some cases to our Member at Ottawa. While the meetings were not entirely informal, there was enough informality to produce entire freedom of discussion, and it was never hard to get people to take part in the discussions. This led many men who had not previously done so, to form opinions on the questions before the Club, and to express those opinions in public. By this means they had found an increased interest among the boys and young men, who talked over those matters among themselves in order that they might be able to take part in the discussions. The boys from the Collegiate were always at the meetings at night.

Mr. A. McKenney, of Essex, told how he had found the Farmers' Institute Clubs of great benefit among the farmers of Essex County. Personal canvas had been an excellent means of increasing membership. He emphasized the necessity of finding enthusiastic men who were prepared to take hold of the matter in a business-like way and push it along. In fact, he would not organize a Club except in a locality where he knew such men could be obtained. He had never had any trouble in getting plenty to take part in the discussions by asking questions and so on. His Institute Club had had a very enthusiastic president, and it was largely from his efforts that the Club was such a success.

Mr. W. E. Sheax, Elmbank, Peel County, described the part taken by the Institute Clubs of his county in the introduction of rural telephones in his district, and how difficult it was at first to get people to take an interest at all in the proposal. Now, as a result of vigorous personal canvas, they have fifty telephones in working order, and the thing is an assured success.

Mr. Chas. Porter, Appleby, had found considerable difficulty in starting the Institute Club in his section, but it had soon proved to be of great benefit to the farmers in the district, and now an undoubted success. Among the subjects discussed were: "Winter feeding of Hogs;" "The Planting of

Trees, the varieties suitable for the different kinds of soil, etc." A great many questions were asked, and there were very lively discussions. He related how on one occasion when they had two delegates sent out by the Department of Agriculture, Toronto, to a regular Institute meeting, the subject for discussion was the "Beef Animal," and they brought an animal into the hall and took up the work with practical illustrations.

He thought the farmers did not start to interest their sons in the work of the farm early enough. About the time a boy can start to smoke cigarettes is the time to start him studying some subject connected with the farm and with stock. The Farmers' Institute Club organized in Nelson Township has been a splendid success. They had a farmers' picnic at Strathcona Park, under the auspices of the Appleby and Nelson Clubs, which was attended by nearly 400, and was very successful.

Mr. Morris had twenty men at the start of the Institute Club, and the meetings were held twice a month, on the first and third Wednesdays. Some very excellent papers were read at the meeting. Their Club would occasionally visit the other Club in that vicinity and hold a debate, and always had a very pleasant time. They already had two Clubs in his section, and he was going to organize another, for he believes they are the best schools possible for a young man, and will be a very great help to the Farmers' Institute.

Mr. Snider, Secretary of the Carlisle Club, organized a Farmers' Club two years ago, and the first year did not accomplish very much. Last year, however, they had much better success. They had two or three good debates, and he was now quite satisfied with the outlook.

Mr. Beam, of Black Creek, thought it was a mistake to disband in the summer time. The Women's Institutes did not do that, and they have been wonderfully successful in Welland County. The subjects they take up, and the papers they read are printed in the local papers; they are carrying on their work with great enthusiasm, and are very successful. He thought the men might learn from the ladies in this respect. He believed a great work could be done through the instrumentality of the Farmers' Club.

Mr. W. A. Munroe, Morrisburg, had some discouraging experiences in endeavoring to form Farmers' Clubs, but found it was invariably due to lack of a clear understanding as to the nature of the work on the part of the farmers themselves. Where interest had been aroused he had found it a very easy matter. He believed that the meeting should be devoted to the consideration of one subject, which should be discussed thoroughly, rather than to have two or three subjects, and not dispose of any of them.

Extracts from Reports sent in by Officers of Farmers' Institute Clubs.

Mr. Jas. Moore, Kirkton Club, writes:—

"I was successful in starting one last winter in our village; first meeting was poorly attended, only some seven or eight persons turned out; but we managed to appoint a president and a managing committee, and a look-out committee for the purpose of getting in members. Then we arranged to meet every two weeks: so our next meeting was well advertised, and we had a very good crowd. Our program consisted of music and singing, and I was asked to take up the subject of 'Seed Grain,' which I went prepared to do, and found them ready to discuss it with me. At our next meeting it was decided to have a man from each township discuss 'Road-making.' After two meetings we had lots of members ready to take part, and our subjects are selected to suit the seasons of the year as they come around. When spring came, the following subjects were discussed:—'Preparing the

Seed Bed,' 'Roots and Corn,' 'Selecting and Breeding of Cattle, and Horses,' 'Dairying,—from two standpoints, home dairying and the factory,' discussed by men who have had experience in both. Then came the time of the year for haying. This will give you an idea of the work done at the Farmers' Club. I must say that everyone seems to be interested in it from a personal standpoint, as he expects some time to be called upon to take up some subject."

Mr. A. E. Wahn, Brant Club, writes:—

"We have conducted experiments in fertilizers."

Mr. Wm. Laidlaw, Eastnor Club, writes:—

"We bought about $200.00 worth of grass, clover and other seeds which gave good satisfaction. The Club will certainly help the Institute. We expect to hold a field meeting about October 14th; subject, 'Drainage of Swamps.'"

Mr. J. F. Fletcher, Valetta Club, writes:—

"It was generally thought by people of this vicinity that subjects discussed, pertaining to farming, at these meetings were a great help, one farmer giving his idea on certain subjects, and learning new ideas from his neighbors."

Mr. S. M. Sinclair, Nelson Club, writes:—

"Our greatest difficulty is to get the members to take part in the discussions. We devote one hour of our time to a literary program, which has the effect of bringing out more of the young people."

Mr. Alf. L. Bard, Bardsville Club, writes:—

"We discussed among others the following subject:—'Why should Farmers Co-operate?' Our Club was organized in January last, and all members have taken a lively interest. We always invite the Women's Institute members to our Club meeting, and they furnish a programme, after our discussion, which makes the meetings more interesting."

Mr. E. Sackrider, Hillview Club, writes:—

"We discussed among others the following subjects:—'Oats or Barley for Feeding Purposes?' 'Potato and Onion Culture,' 'Best Feed for New Milch Cows,' 'Raising Calves,' 'Root Culture in General,' 'Good Roads,' 'Preparation of the Soil,' 'Raising Pigs,' 'Poultry Raising,' etc."

ANNUAL REPORT

OF

The Agricultural Societies

OF ONTARIO

AND OF THE CONVENTION OF THE

Ontario Association of Fairs and Exhibitions

FOR THE YEAR

1908.

(PUBLISHED BY THE ONTARIO DEPARTMENT OF AGRICULTURE.)

PRINTED BY ORDER OF

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TORONTO.

To the Honourable WILLIAM MORTIMER CLARK, K.C.,
Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the pleasure to present herewith for the consideration of your Honour the Report of The Agricultural Societies of Ontario for the year 1908.

Respectfully yours,

NELSON MONTEITH,

Minister of Agriculture.

TORONTO, 1908.

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ANNUAL REPORT

OF THE

Agricultural Societies of Ontario, 1908.

To the Honorable Nelson Monteith, *Minister of Agriculture*:

Sir,—I have the honor to present herewith the report of the Agricultural Societies of Ontario for the year 1908. It contains the proceedings of the Eighth Annual Convention of Ontario Association of Fairs and Exhibitions, together with the financial statements of all the Societies in Ontario, the money paid for prizes in the various classes, and a comparative statement of the grants for 1907 and 1908. The report also shows the value of land and buildings owned by Societies, as far as reported to the Department. A few short notes on some of the principal topics discussed at the Convention, are also appended, all of which, I trust, may be useful.

Having been asked by Societies in various parts of the Province for suggestions for suitable styles of buildings, I am including a number of illustrations in this connection, which were sent me by one of our most enterprising Societies.

I have been for some time in communication with the various Breeders' Associations with reference to furnishing me with illustrations which they consider as typical of the breeds which they represent. With their co-operation I am enabled to include in my report some excellent illustrations of the principal breeds of horses, cattle, sheep and swine, which should prove of interest and of educational value.

Faithfully yours,

J. LOCKIE WILSON.

ONTARIO ASSOCIATION OF FAIRS AND EXHIBITIONS.

OFFICERS FOR 1908.

President..... Wm. Laidlaw, Guelph.
1st Vice-President .....H. J. Gould, Uxbridge, Ont.
2nd Vice-President..... J. U. Simmons, M.D., Frankford.
Secretary-Treasurer.....Alex. McFarlane, Otterville, Ont.
Corresponding Secretary ..... J. Lockie Wilson, Toronto.
Auditors..... Joseph Hudspeth, Caledonia,
William Collins, Peterboro.

Executive Committee.

R. Cowan, Galt.
Johnston Ellis, Lindsay.
R. H. Leary, Peterboro.
J. Thos. Murphy, Simcoe.
John D. Orr, Meadowvale.
J. W. Sheppard, Cayuga.
Geo. E. Lee, Highgate.

ONTARIO ASSOCIATION OF FAIRS AND EXHIBITIONS.

ANNUAL CONVENTION

The eighth annual convention of this Association was held in the City Hall, Toronto, on February 19th and 20th, 1908, an unusually large number of delegates being present. The President, William Laidlaw, Guelph, occupied the chair, and after the delegates' certificates were fyled, proceeded with his address, as follows:

DELEGATES TO CONVENTION.

Atkinson, F. W.....Strathroy
Allen, A. F.....Comber
Atkins, R. J.....Caledonia
Alsey, Norton.....Bolton
Anderson, Wm.....Fergus
Atkinson, C.....Caledon
Agnew, R .....Meaford
Atmore, T. S.....Paris
Brodie, W. A.....Petrolea
Brake, H.....Petrolea
Black, W. D.....Parham
Ball, Alfred.....Niagara
Birdsall, F.....Peterboro
Brown, E. A.....Marshville
Balton, John.....Wildwood
Bormer, Robert .....Humber
Brockbank, John.....Paris
Black, John ....Kilsyth
Bricker, Wilton R.....Berlin
Boughner, E.....Simcoe
Broderick, J..... ...Mitchell
Boyd, John A.....Flesherton
Brill, S. R.....Teeswater
Clements, James.....Chesley
Crow, Arden... .....Tara
Campbell, Archibald.....Barrie
Cole, D. M.....Lakeside
Colyer, Wm.....Ingersoll
Cooney, John.....Brampton
Clark, W. F. . .....Goderich
Clark, Mrs. W. F.....Goderich
Chann n, Wm.....Oakwood
Cohoe, A. W.....South Woodslee
Cowan, R. E .....Galt.
Christie, Henry.....Shelburne
Charlton, S.....Springfield
Colvin, George C.....Teeswater
Downey, George .....Bolton
Doupe, Amos.....Kirkton
Doupe, Samuel ....Kirkton
Dolson, A.....Alloa
Duff, J. M.....Guelph
Evans, David.....Strathroy
Ewing, A. R .....Waterford
Erwin, George .....Malton
Ellis, Johnson.....Lindsay
Ewart, S. H.....Chesley
Ferris, J. B.....Campbellford
Fawcett, Wm.... .....Wolfe Island
Ferguson, F.....Inverary
Fargey, A. B ....Stirling
Fraser, D. H.....Northport
Foster, Fred..... Ingersoll
Field, J. G.....Tavistock
Fry, W. A; .....Dunnville
Fox, George.....Drayton
Feashy, Thomas.....Uxbridge
Garbutt, J. H..... . Peterboro
Gough, E..... Powassan
Gibson, John..... .....Inverary
Gummer, G. A.....Colborne
Godfrey, C. D.. .....Parham.
Graham, John..... ..Brampton
Glendenning, John. .... Sunderland.
Gilchrist, Hector.....Arkell.
Gardhouse, Robert.....Malton.
Grant, W. A.....Becher.
Garvie, A. W.....Kilsyth.
Graham, A. C.. .....Victoria Road
Gould, H. J .....Uxbridge.
Goring, A. H.....Tavistock.
Greenliss, F. W.....Milton.
Goddard, H.....Listowel.
Graham, R.....Saurin.
Grey, George.....Port Elgin.
Hudspeth, Joseph.....Caledonia.
Headrick, Wm.....Beachburg.
Huston, J.....Sault Ste Marie.
Holwell, F.... .....Baden.
Hickson, Wm.....Bobcaygeon.
Harvey, R.....Guelph.
Hanmer, D. G.....Burford.
Hyatt, A.....Pelham Centre.
Hurley, D.....Vankleek Hill.
Hammill, W. H.....Beeton.
Hewer, James.....Guelph.
Hanmer, J. G. .....Burford.
Harper, M. S..... .....Madoc.
Harrow, David.....Priceville.
Henderson, G G.....Hamilton.
Jennings, F. A. ..... Thedford
Johnson, James E.....Simcoe.
Johnson, W. H.....Sundridge.
Johnson, J. E..... .....Chapman.
Jones, W. J..... . ..Parry Sound.
Johnson, J. H.....Fordwich.
Keith, W. A .....Comber.
Kerr, R. N..... .....New Hamburg.
Kelly, T. A.....Millbrook.
Kincaid, P.....Chesley.
Leary, R. H ....Peterboro.
Lee, George E.....Highgate.

DELEGATES TO CONVENTION.—*Concluded.*

Logan, Roy.....Thorndale.
Lewis, Wm.....Bobcaygeon.
Langton, G. R.....Kent Bridge.
Livingstone, W. W.....Tillsonburg.
Last, Nicholas.....Cayuga.
Lee, A. B.....Woodstock.
Lougheed, Jacob.....Markdale.
Labrosse, L. J., M.P.P.....Alfred.
Leslie, George.....Listowel.
Laidlaw, Wm.....Guelph.
Murphy, J. Thos.....Simcoe.
Marshall, Samuel.....Walter's Falls.
Moorecraft, J.....Bowmanville.
Martin, George A.....Caledonia.
Morrow, A. T.....Maxville.
Miller, J. W.....Streetsville.
Miller, J. L.....Varency.
Murdock, J. Y.....Jarvis.
Meldrum, George J.....Morriston.
Menhennick, John.....Thedford.
Mabee, L. M.....Goderich.
Muir, A.....Ceylon.
Martin, Wm.....Binbrook.
Marshall, John S.....Chesley.
Ming, E.....Napanee.
McDougall, Neil.....Tara.
McGregor, Wm.....Arden.
McAllister, Jas.....Wolfe Island.
McVicar, A.....Sault Ste. Marie.
McGuire, Wm.....Waterford.
McLean, D. J.....Morriston.
McArthur, C. A.....Sarnia.
McBrian, D.....Goderich.
McFarlane, Alex.....Otterville.
McFarlane, E.....Otterville.
McNamara, Wm.....Hawtrey.
McDonald, Charles.....Golspie.
McQuillan, D.....Lucknow.
McKinnon, A.....Hillsburg.
McGill, P.....Erin.
Naylor, Isaac.....Islay.
O'Reilly, Charles.....Norwood.
Oliver, E.....Ingersoll.
Orr, J. D.....Meadowvale.
Oatman, W. F.....Cornell.
Oatman, A. L.....Cornell.
Park, E. L.....Essex.
Palmer, C. O.....Marshville.
Potter, J. G.....Pelham Centre.
Pearson, Henry.....Weston.
Price, D. H.....Aylmer.
Patterson, Allen N.....Harriston.
Patterson, H. L.....Harriston.
Pringle, W. W.....Arden.
Patterson, Mrs. J. A.....Newbridge.
Quinlan, D.....Barrie.
Roxburgh, J. E.....Norwood.
Ritch, J.....Drayton.
Russell, W. E.....Tavistock.
Raikes, George.....Barrie.
Roach, A.....Epping.
Rowbotham, G. D.....Strathroy.
Sawtell, R. G.....Woodstock.
Smith, A. M.....Meaford.
Spear, W. M.....Highgate.
Stock, W. E.....Waterdown.
Sloat, J. C.....Fenwick.
Sprague, L. F.....Ameliasburg.
Sheppard, J. W.....Cayuga.
Simmons, Dr. J. U.....Frankford.
Simmons, L.....Frankford.
Staples, L. F.....Ida.
Stephens, C. L.....Orillia.
Sheppard, F. E.....Paisley.
Sproule, R. J.....Flesherton.
Strong, Mrs. J. Y.....Gorrie.
Thomas, H. E.....Windham Centre.
Thrasher, G. G.....Stirling.
Truman, T. F.....Midland.
Telfer, Geo. L.....Paris.
Taylor, James A.....Bradshaw.
Tully, J. H.....Parry Sound.
Telfer, T. S.....Drumbo.
Thomson, J.....Sharbot Lake.
Vanmeer, N.....Sundridge.
Vrooman, J. L.....Sunderland.
Verral, G. W.....Weston.
Veetch, Walter.....Winterbourne.
Wade, G.....Dorchester.
Walker, R. E.....Caledonia.
Wiley, Isaac.....Caledonia.
Wood, James.....Thorndale.
Wickham, F.....Walter's Falls.
Wright, T. G.....Picton.
Williams, Charles.....Tillsonburg.
Webster, W. O.....Udora.
Westington, R. A.....Port Hope.
Wragge, George.....Port Hope.
Wright, Joseph.....Beeton.
Watson, James A.....Rockwood.
Wilson, W. A.....Lucknow.
Watson, Ray M.....Shelburne.
Watson, Mrs. Ray M.....Shelburne.
Wilson, W. J.....Erin.
Weir, Wm.....Wroxeter.
Wood, W.....Bradford.
Wilson, J. F.....Listowel.
Wilson, J. C.....Listowel.
Wilcox, O. J.....South Woodslee.
Youngs, A. F.....Embro.
Young, John M.....Harriston.

PRESIDENT'S ADDRESS.

By Wm. Laidlaw, Guelph.

From the fact that Agricultural Societies operating under the Act respecting the same receive annually from the Government and from the public,

At the Ring Side, S. Victoria Agricultural Society.

a much larger sum of money than any of the other branches under the direction of the Department of Agriculture, it should naturally follow that greater and better results would accrue therefrom. If we are not fulfilling our mission in this regard we are not doing our whole duty.

While it may not be possible to point to immediate commercial results, such as some of the other Associations can do, still there are great fields of usefulness open to us in stimulating and keeping alive the keen spirit of competitive rivalry in every productive class of the people, in intensifying and impressing upon all agricultural and industrial classes the dignity of labour, by continually bringing forward the best products of the farm in all its branches, the most advanced results of industrial ingenuity and mechanism or any other kindred branches of science or art, giving to each the strongest possible educative trend.

This is largely the field in which our work should be done. Our aim should not be simply to hold a fair and rest satisfied that we have done our duty because its financial returns have been satisfactory.

One of the most important results of the working of an Agricultural Society should be that all who in any way come in contact with it should become broader-minded, that the spirit of selfishness, and narrowness, should be driven out, that we should learn to respect the rights of others, that as our Fairs are the common meeting place of all classes, ideals should be placed before them which will help to wean them away from their narrow ruts of life and make each one feel that his own interests should be the common interest of all, and that while Agriculture stands at the base of all prosperity it cannot be dissociated from the other members of the trinity " Industry and Commerce," and that, through this welding together, the character and standard of the whole people will be raised.

It has been truly said that the twentieth century belongs to Canada. This much-to-be-desired consummation, however, can only be brought about by applying our forces in the right direction, by developing our natural resources along such lines that every product of the farm or the factory placed upon the open markets of the world shall, because of its own superiority, command the attention of the great purchasing public. We must always remember that the only monopoly we can hope to enjoy, is in the fact that our goods being stamped "Made in Canada," is a sufficient guarantee to the world that they are "the best."

Let us then, both individually and collectively, look forward with higher aims, nobler aspiration and better ideals, making our influence upon the life of our growing nation always tell for good.

We should not be content to rest satisfied with what we have already achieved. Let us gather a lesson from ourselves—let us for a moment take a retrospective view of our own growth. Let us set ourselves back to some point, say seventy-five years ago, and see our country then, almost an unbroken wilderness,—see those hardy pioneers leaving their native land, buoyed up by an unflinching faith, crossing the broad Atlantic in vessels that to-day would be considered almost unseaworthy, making their way up our mighty inland waters, then back through the trackless forests; then see the little shanty and the smoke curling in wreaths from openings in the woods, and the knell of the drowsy past breaks in echoes at our feet; and so follow on down through the everchanging corridors of time, and watch that generation of noble men and women one by one lay down the arms of the "Warfare of Peace," and see ourselves to-day, a nation in embryo, gathering laurels from our products in this keen competitive age in the open markets of the world.

But we must not stop at that; we must wake up and look to our possibilities. We have in Canada, a territory of about four million square miles with a population of about six millions, or less than two persons to the square mile. What a power we should be, what a commanding influence we should have morally, socially, and commercially, when our population shall equal per square mile that of Britain or Denmark, Holland or Germany.

If we forget not the secret of a nation's strength, the limit of our own greatness will be found only in the limit of His greatness, who desires to rule in the hearts of men.

Would it not be a good time now to erect some memorial to connect the past with the present and future? Could we not with the aid of many agencies which might be set at work, erect in some conspicuous place, say on the grounds of the Ontario Agricultural College, a memorial to mark our veneration for those early pioneers who so well and truly laid the foundation of our present greatness?

The programme which has been prepared for presentation to this meeting covers a great many important points, to which we invite your most careful consideration. Apart from these items there are only a few points to which I would call your attention.

It is perhaps too soon to judge as to the workings of the new Act, it having been in operation only during the past year. In the discussion last year, attention was called to what seemed to be a very serious defect as regards the distribution of the grant. The idea of dividing it according to the amount paid in prizes, is perhaps as good a basis as could be found; still it contains this serious defect that each society is dependent for its share of the grant on the proportion its prizes bear to the whole amount paid in prizes by all the societies in the Province, and it may, consequently, vary very much from year to year. In the practical working out of the distribution last year, it would seem that the Government paid about one-third of a dollar to each dollar paid by the Societies themselves. Would it not be more stable, satisfactory and simple to apportion the Government aid in this way, one-third paid by the Department and two-thirds by the Society. Each Society would then stand on its own base.

Then, again, the limit of $800 to any one Society is exceedingly unfair to the larger Shows. A Society paying $4,000 in prizes, receives no more aid than one paying only $2,400. There should be an increase in the limit, to, at least, $1,000.

Another point is that the Government grant to Spring Stallion Shows and Seed Fairs should be from a separate fund, the idea being to put all Societies on the same proportionate basis as regards their regular work.

In the fall of 1906, a committee was appointed to prepare a uniform set of books for use of secretaries. This was done, and the Minister agreed to supply the books free to the Societies. It will be for you to say whether they were satisfactory, make any suggestion for improvement or ask for any explanation regarding them.

In common with almost all countries we have felt to some extent the financial stringency. So far as we have human control, Canada has, because of the foresight of her leading financiers and the great development of our natural resources, felt it much less keenly than many other countries, and from the optimistic views expressed by leading bankers and railway men, the outlook for the future is not at all cloudy, but we must remember that the basis of these shrewdest calculators is largely founded on this point, "What will the natural products of Canada yield in 1908?" Whilst trusting in the kindness of Providence, much depends upon the strong right arm of the

farmer, and the working of our agricultural and other kindred societies, in fostering his efforts.

We deeply regret to chronicle the death of T. F. Wallace, Woodbridge, one of the oldest and most esteemed delegates. His wide knowledge and great experience in matters pertaining to the welfare and advancement of our cause has been of invaluable assistance to us on many occasions.

I wish to convey my thanks to our Superintendent, J. Lockie Wilson, for his uniform kindness and courtesy on all occasions during the past year.

I have pleasure in welcoming you to this, our eighth annual convention, and trust that much good may result from your deliberations.

It was moved by Charles O'Reilly, Norwood, seconded by A. Norman White, Meaford, that J. Thomas Murphy, Simcoe, Jas. Sheppard, Cayuga, and Dr. Simmons, Frankford, be a committee to report on the President's address.

Moved by H. J. Gould, seconded by J. B. Gould, that a vote of thanks be tendered the President for his address. Carried.

The CHAIRMAN: One point I would like to discuss to some extent is in reference to the division of the grants. I recommend that the Government give one-third for every two-thirds paid by the Societies, in this way making some fixed rule. You will find that sometimes a Society will receive a much larger sum than others: for instance, if half the Societies in the Province were to increase their prizes by one-hundred dollars each, that would make $10,000 and you can readily see that these Societies would receive a larger grant than previously and other would have to lose.

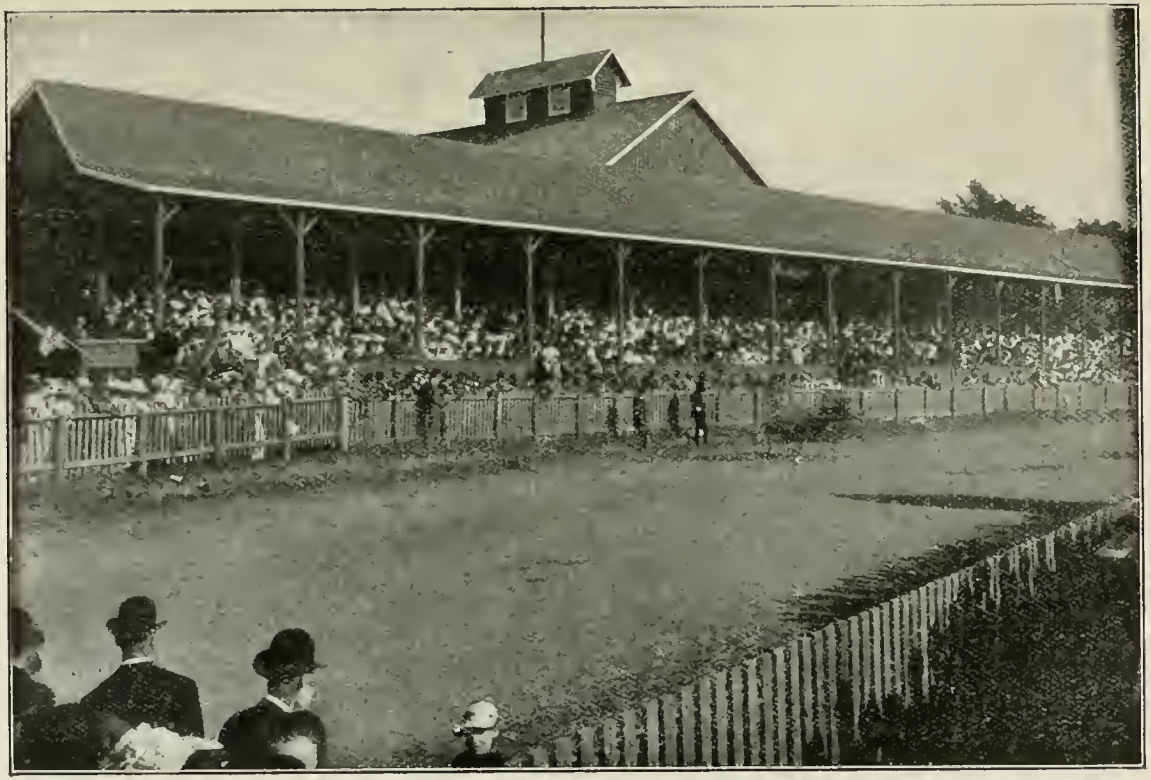
A MEMBER: Don't you think it would affect the $70,000 in some way?

The CHAIRMAN: I hope the grant will not be limited to $70,000. It is eighteen years since we got any additional grant from the Government, and I think it is time the grant should be increased. Other Institutions that are less deserving are receiving larger grants. Our Societies have increased in number while the grant has remained stationary. Of course, I know that some Societies last year received more than they did for a number of years previously, but you can readily see that if half the Societies in the Province increased their prize-list, so that they would receive one-hundred dollars additional grant, the other Societies would have to take less than they had been getting in the past. We cannot make it any more than $70,000, unless the Government come to our assistance.

A MEMBER: If we take the basis on thirty-three and a third cents, it would be fair to all. I do not know how we can very well fix it in any better way unless we have some chance of getting $15,000 or $20,000 from the Government. If we received a larger grant, then I am satisfied to deal with the matter in whatever way would be to the best interests of the Agricultural Societies. Is there any evidence of getting an additional grant from the Government?

GEORGE E. LEE: The Government was very wise in stipulating that the grants should be given on the three years' basis; because, in case of wet weather, it would be a great loss to some Societies, and it would be better for us to give the present Act a few years' trial before urging amendments. I am heartily in sympathy with the idea of asking the Government to increase the grant. I believe that what we get here is a mere pittance compared with the grant they get in the Province of Manitoba, and it is a baby compared with Ontario.

CHAS. O'REILLY: I cannot altogether agree with the last speaker. Take cities and towns where they put up prizes for horses in a great many classes, they receive a much larger grant, and I think that should be seriously con-



Grand Stand. (South Victoria Society.)

sidered in fixing the amount, because these Fairs are for the benefit of the farmers, while those in cities and towns are not controlled by them. The smaller villages have just as successful shows, and they are as good as these cities.

A. C. Graham: I was very much pleased to listen to the last speaker discussing the fact that in rural districts they are not getting as good a Show as they should. The tendency of the time is to carry the Fairs to the towns. In a rural district where you have no large village or city to back up the Fair, it will be a very difficult matter for Directors to keep their Fairs up. If matters are not adjusted before very long, Fairs that are held twenty miles from a city or town, will have to go out of business, and I would be very pleased to hear from the Superintendent or some of the members, how many Societies have ceased to exist this year. While our agricultural interests are the most important, and while we are raising sons and daughters, every encouragement should be given to them, and they should be educated in the rural districts and trained so that they will have a love for the farm, which is not the case at present. Everything has been centralized and a larger percentage of the boys go to the cities, and this is a mistake. We should educate the boys so that they will love to stay at home, and so that the cities will not be any inducement to them. Later on, I am going to make a motion asking the Government for an increased grant. They should come to the aid of the people in the rural districts because they have difficulties that the people in the cities have not.

D. Evans: If we could settle this great uncertainty of what we are to receive from the Government, it would be a move in the right direction. We are making up our prize-list in accordance with the amount of money we are going to expend, and we want to know where we will stand at the end of the year. As the President has remarked, if our grant was given on the ratio of 33⅓ per cent. I would like to see it made permanent. Supposing one Society is backed up by a much larger industrial community; it is much better able to give the money for prizes, and that would be to the detriment of the small township Shows. If they are able to do that, and the Government only sets apart $70,000 to be divided among the Societies, those which stand in a prominent position would be able to swallow up most of the money. I would like to see this thing settled, so that we would have some conception of just where we stand, and if it is one dollar for every three, I am heart and soul in favor of it; because I would rather take a dollar or two less and know exactly where we are, than have the supposition that we are going to receive a much larger amount, and then when the time comes find that that is not the case.

W. E. Stock: In order to facilitate this question before us, a motion ought to be put, that the Government be waited on in reference to this additional grant, and if that motion carries, then a deputation might be appointed from this audience to wait upon them.

A. Kennedy: I cannot see how the Government can give us 33⅓ unless they make an additional grant. As far as getting word as to what the grant will be in time, I must give the Government and Mr. Wilson every credit, because we knew long before we fixed our prize-list, what the amount of our grant would be.

D. Evans: I know that there are a number of small societies that revise their prize-lists two or three weeks before the Show, but if they did that work in May how would they know what they were going to get?

A. Kennedy: Our prize-list was out in June.

Horse Stable. (South Victoria Society.)

D. Evans: I am not finding any fault with the Department; I know they are doing it as rapidly as they can. The only trouble is that the amount is very uncertain.

Dr. Simmons: Any Society should have known what their grant was to be for this year and last. The estimate sent us a year ago came within two dollars. It is not correct that $70,000 are divided among the Agricultural Societies. That sum is lessened in many ways. For Fall Fairs, pure and simple, there are about $65,000 distributed throughout the Province of Ontario. The Seed Fairs, and Stallion and Bull Shows all lessen the grant to exhibitions. If that $70,000 was received solely for the Fall Fairs we would be in a better position than we are to-day.

There is an arrangement made for a deputation to-morrow morning at 11 o'clock to wait upon the Government asking for an increased grant. We should go as a Provincial Institution from every part of the Province. It would be unwise for any particular section to go. Let us appoint a deputation before we adjourn, to lay our claims before the Government.

O. J. Wilcox: I listened to the two gentlemen on the other side of the House speaking of the provisions of the Act, and I came to the conclusion that if their reading of the Act was right, then I did not understand it. It seemed to me that the amendment to the Agriculture and Arts Act, which came into force last February, was for the very purpose of helping those Societies throughout the Province of Ontario, that were spending the most money for agricultural purposes. The statement was made last year to this Convention that many Societies that were holding their Fairs within the limits of cities, were spending a great deal of their money for special attractions and that they were not doing work for agricultural purposes; and that weak Societies, throughout the Province were suffering, and the defects in the old Act were pointed out; first, that there was unjust distinction between so-called district and township Societies by which district Societies were given grants that could not be less than $300 and might be as high as $800, while township Societies could not receive more than $100, and in some cases obtained as low as $32. The injustice of these conditions was quite apparent. Many township Societies were expending much larger sums for agricultural purposes than a number of the district ones. It is apparent to me that the whole trend of the new Act was to assist those Societies in rural districts that were doing a work for Agriculture that Societies which were within the limits of cities or towns were not doing.

That was the conclusion I came to, and it seems to me from the statement made to this Convention by the Minister of Agriculture at our last meeting when he asked us to give this Act a fair trial before we asked for an amendment, that we should do so.

D. Swayzie: Our Society is getting double what it received in former years. In 1906 we got $91, and last year $191, because we had been paying a great deal more than others for agricultural purposes. There were other neighboring Fairs that had been getting twice the amount that we did, and now we are getting more than they do; because they spent their money in horse races. A great many of the delegates are complaining about their grants, simply because they are not getting as much money now as they did as they are spending their money on special attractions and not for agricultural purposes.

J. B. Gould: This Association was formed, not to create rivalry among the different Societies, but to help every one of them as much as we can. The idea is not that the big Fairs should try and gobble up the little ones, but to assist them. I do not believe that there is any Society which is not doing

some good, and it is only right that we should assist them. This question will come up again this evening, under the proposition, "Should Grounds and Buildings of the Societies come in for the Grant?" We should not give the Government the idea that we are not harmonious, and that we don't want a bigger grant, because we do. I would like to hear from our Superintendent on this question. He visited us this year and gave us a lot of good advice and suggestions that he picked up from his travels around.

A Member: Our experience is not the same as that of my friend. I represent a rural Society and we are doing good work. Our grant this year has not been one half as much as it was in 1906, and it militated greatly against us, and I hope something will be done. We paid more for prizes in 1907 than the year previous, and our grant was only one-half as much.

G. L. Millar: We understand that the Government grant is based on what we expended during the past three years. We are in a position to figure out what it would be. We know what we are going to receive, and we come here to unnecessarily discuss this question, and we are fooling away the time of 300 or 400 delegates, when we know well enough what we are going to receive.

A Member: How do you find that out?

G. L. Millar: They state they will pay us on the basis of what we spent for agricultural purposes for the previous three years.

The Chairman: How do you know what your neighbor will get?

G. L. Millar: We have not got that return, but the Department has, and we, surely, are intelligent enough to have enough faith in us to trust them to do the same with one fair as with another, and if we spend $400, $800 or $1,000, we will receive a grant in proportion to the amount expended. I will support a motion to petition the Government to give us a larger grant, but it is up to us first to support our own fairs, so that we will be in a position to raise more money. Let us stand on our feet and fight our own battles. I know that in some of the rural constituencies, that are newly settled, such as Parry Sound, Haliburton and Nipissing, it is difficult for them to get along, and I would be in favor of giving them an increased grant.

A. C. Graham then read the following resolution which was carried unanimously at the Eastern Ontario Fairs' Association held in the City Hall, Ottawa, on the 23rd of January, 1908:

"In view of the importance of the work being done by Agricultural Societies throughout the Province, in the promotion and advancement of agricultural interests and the improvement of our flocks and herds, we respectfully ask that the present grant of $70,000 now made by the Department of Agriculture, for the Province of Ontario to Agricultural Societies, be increased to the sum of $100,000," and moved, seconded by Jno. Glendenning, "That we, the members of the Ontario Association of Fairs and Exhibitions, heartily endorse the said resolution, and unite with our Eastern Members in urging the Government to increase the grant to $100,00."

D. Hurley: I am President of the Eastern Fairs' Association, which passed the resolution, and I was sent here in order to have it brought before this meeting. Twenty years ago, $70,000 was all right, but to-day it is a mere bagatelle. We do not want to embarrass the Government, but Agricultural Societies ought to receive more money for the great educational work they are promoting. The country is advancing much more rapidly than in former years, and we should get an increased grant. I am in favor of leaving it to the President to name the Committee.

Dr. SIMMONS: As President of the Central Fairs' Association, I might say that we held a meeting in Frankford, and it was resolved, on motion of the President of the Frankford Agricultural Society, seconded by Mr. Curtis, that the Central Fairs' Association petition the Government to make an extra grant of $30,000, and that this motion be laid before the Fairs' Association, at Toronto. We also were of opinion that this Association should devise ways and means for the distribution of the money.

J. W. SHEPPARD: It seems to me that it is very inconsiderate on the part of this Association to first of all, ask the Government for more money. This matter should come up in connection with the motion in regard to a grant for buildings and grounds. We should proceed with the order of business and leave the matter over for further consideration.

The CHAIRMAN: This motion is an amendment to the President's address, and it is quite in order that it should stand. My idea in bringing that matter before the Convention, was that I want to see every Society placed on the same basis. You all know well enough, that if your Society has been paying a certain amount for the past three years, you will draw a certain amount, but you do not know what that amount will be because you do not know what your neighbors will draw. One Society here, and another there, might earn a larger grant, and yours would go down. There is only $70,000 to divide, and what I want to see is that every Society that pays a certain amount of money for prizes, should receive a certain fixed amount. If we spend $2,000 in prizes, we would receive $666, and that is what we want to know. The Society that I represent drew $800, this year; next year we might not draw $600, because other Societies might increase their grant so much that ours would be bound to go down.

A MEMBER: You cannot work your plan out while the Government is paying out a fixed sum.

The CHAIRMAN: In educational matters, they say that a school section shall receive a certain amount of money if they do certain things, and I want our grants to be on exactly the same basis. The Good Roads grant is in the same position.

D. EVANS: Delegates cannot tell what their grants will be unless they know what their Societies are going to expend, and when I heard this gentleman say, that they knew what they were going to get, I said, "he cannot tell; he has got to know what other Societies are getting."

W. CHANNON: Each of the Societies in the Province is paid a percentage on the amount of work they do. The more a Society expends for agricultural purposes, the bigger grant it receives. If you say the Government will pay one-third of the amount, you do not know what you are going to get until you get through with the work. It depends largely on what effort you put forth and the success you make of the show. If the Government makes it $100,000, we will not know any better then than we do now. Do the work and you get your equalized percentage, and I like that way of doing it.

At the close of the discussion the vote was taken, and the motion declared carried.

A motion was then put and carried that all the delegates present go up to interview the Minister.

The CHAIRMAN: The next thing on the program is the report of Special Committees. The only one appointed last year was that to deal with Fair books. The committee cannot say whether it was satisfactory; it is for the Directors to say.

A MEMBER: We are well satisfied with the report of this committee. We appointed it and are satisfied with its work.

Cattle Stables. (South Victoria Society.)

The CHAIRMAN: It is a difficult matter to make a set of fair books that will be satisfactory to all Societies. The committee did the best they could. I know there are Secretaries here, who have been following a certain system for a number of years and they think theirs is best, and it is pretty hard to wean them away from it. It would be well to try these books for another year, anyway, because they are very simple. Mr. Wilson says that a great many Societies have adopted them, and next year you will be able to say whether they have been satisfactory or not.

A MEMBER: I find the books very satisfactory. It is a good suggestion to try them another year, because then we will be in a better position to say whether we like them or not.

J. LOCKIE WILSON: So far as fair books are concerned, the committee selected what they considered the best they could possibly get. The Department paid for them, sent them to the Secretaries and told them that it was optional whether they used them or not. In sending out the books, I stated distinctly, that if they had a better system, they could go on and use it.

A MEMBER: One object in having these books was to facilitate sending in the reports to the Department.

J. W. SHEPPARD: We use this set of books, sent out by the Department and find them very satisfactory and very useful to the Secretary, and I move a vote of thanks to the Department of Agriculture for sending these books to the Societies last year and that the system be adopted. The motion was seconded and carried.

REPORT OF SUPERINTENDENT OF FAIRS AND EXHIBITIONS.

By J. LOCKIE WILSON, TORONTO.

The first year of my service as Superintendent of Fairs and Exhibitions has just closed, and I wish to express my thanks for the uniform kindness and courtesy extended to me by the officers of the several hundred societies in the Province during this period.

I am glad to be able to report that the new Act which came into force in 1906 has been working satisfactorily. The basis upon which the grants are figured would seem to be fair and reasonable. The $70,000 granted by the Government is apportioned on the average expenditure for agricultural purposes for the previous three years. Last year's grants were based on the expenditure for 1904, 1905 and 1906. The proposition of the President to pay the Government grant on the basis of one-third of the expenditure would be unfair to all but a few of the largest societies, and I am of opinion that the maximum grant of $800 fixed by the Act is reasonable and fair. $5,000 are apportioned among the Canadian National, Western and Canada Central Fairs. The maximum grant to any of these three fairs is $2,500, based on expenditure for purely agricultural purposes. The Legislative appropriation for Fall Fairs has been lessened by grants to societies holding Spring Stallion and Bull Shows and Seed Fairs. These receive maximum grants of $50 and $25 respectively.

The exact amount of the Legislative grants paid to Agricultural Societies, apart from those to Spring Fairs, this year was $66,584, to city exhibitions $4,562, stallion shows $2,206 and stock societies $1,210. These latter do not hold Exhibitions, but expend their funds solely on the purchase of registered breeding stock. The West Algoma Agricultural Society

received a special grant of $1,800, besides their regular apportionment based on expenditure for agricultural purposes.

The total paid to Agricultural Societies, including the three city exhibitions and all special grants, was $77,871. The value of land owned by societies in the Province of Ontario, outside the cities, is $195,915, of buildings $325,418, making a total as returned to the Department of $521,323. From these figures you will have some idea of what would be required if additional grants were made on this half million dollars' worth of property owned by the societies in this Province. For agricultural purposes alone, as laid down by the Act, a quarter of a million dollars was expended. The prizes paid at the Spring Fairs in 1907 make an aggregate of $4,000 and the total expenditure at these shows $5,100. There were twenty-seven Stallion Shows at which horses alone were exhibited, together with a number of combined shows and Seed Fairs.

Last year there passed through the gates of exhibitions 1,385,263 persons, thus you can see that you are representing an institution of great importance to the people.

There has been an increased demand for Departmental judges in 1907. Some are not in favor of sending out these judges, but the great majority of the societies in the Province contend that to go back to the old system of having a neighbor judge his neighbors' stock would be a step backward and a turning back of the hands of the clock. There is no doubt that some of the judges sent out are not absolutely perfect and they do not in every case give entire satisfaction. You must remember that this institution, so far as expert judging is concerned, is to a large extent in its infancy. We are frequently asked to send one judge to societies to judge all classes of horses, cattle, sheep and swine. This should never be done, as it is difficult enough for us to get men who can do justice to one class, and the man who can successfully judge either light or heavy horses has his work well cut out, and our most successful ones are those who make a specialty of one class only. I would strongly urge societies to employ extra judges; then you will have better results, as you will get men who are specially qualified to judge the different classes. You cannot expect a beef cattle man to do justice in the dairy classes and *vice versa*. We are sending you the best men we can get, and we must not expect any more of our judges of stock than we do of the judges of the High or Supreme Court Bench. These judges frequently differ, and one set of judges upset the decisions of another. These men are getting from $5,000 to $10,000 a year and your judges receive only $4.00 a day, and, therefore, I say you must not expect absolute perfection in the judges we are supplying. We sent out this year to Spring Fairs, twenty-six Departmental judges and to Fall Fairs 152, making a total of 178. Notwithstanding the fact that a letter was written to every Secretary in the Province asking them to let us know promptly if judges were not satisfactory, we only had five complaints out of the 191 societies supplied, so our judges must have done fairly successful work.

Before completing our judging circuits we write to the different Boards of Directors and ask if the judges named for their fairs are satisfactory, and if reported objectionable in any way, we take off the men complained of and put others in their places, so that ample opportunity is given to Boards to object to those who are not satisfactory. I am hoping for the time when all judges will be able to take the Short Course Lectures on Stock Judging given in the different sections of the Province so as to better fit themselves to fill this responsible position. As a large exhibitor of stock for twenty years, I am in a position to know what a serious thing it is for a farmer

and his sons to raise and care for valuable animals, take them to exhibitions in the pink of condition and have them placed by incompetent judges in a third or fourth place, when, if justice had been done, the red ribbons would have been theirs.

Another forward movement was made this year in the line of Standing Field Crop Competitions. I took that matter up with Hon. Mr. Monteith, and suggested that a special grant be given to encourage the production of better Seed Grain in the Province of Ontario, and that by way of experiment we might have such competitions. After careful investigation the Minister arranged to set aside $1,000 for this purpose. Circulars were sent to all the societies in the Province, and final arrangements were made. Owing to the limited funds at our disposal we were obliged to limit the competition to the first ten Agricultural Societies that applied. One hundred dollars was paid to each of these societies, and the judges were supplied by the Seed Branch of the Department of Agriculture, at Ottawa. The cost of judging was absolutely free to the societies. All they had to do was to make the entries, forward them to the Department, and the judges did their work and awards were made. We are indebted to Geo. H. Clark, Seed Commissioner, and T. G. Raynor for the valuable assistance rendered in connection with this new departure.

Three hundred and twenty-five farmers in the Province entered into this competition and seventy of them received prizes. The fields entered covered and area of three thousand acres. Thus an excellent start was made in the right direction and we hope to be able to get the Government to increase the grant this year, for I believe it to be one of the best and most educational moves that has been made to advance the usefulness of Agricultural Societies. We must improve our field crops and there is no better way to show farmers how to do this than by experts going through these standing crops in the fields, judging them by score cards, explaining decisions and giving valuable information to all interested. I hope that we will be able to arrange so that a greater number of Societies in the Province will be able to take part in this work this year.

The total number of active societies in the Province is 361. We had more before the new Act came into force, but a number of them did no work, being simply adjuncts to some of the larger societies. For instance, there would be a District Society that held an exhibition and two or three township societies within the district that held no Fairs but simply handed over their grants to the district organization. Under the new Act these have been wiped out. About forty societies in the Province held no exhibitions, but now under the new Act they have either ceased to exist or have become merged with others. There are so-called Agricultural Societies in the large cities that were drawing their grants year after year and never held an Exhibition. They elected their Boards and became philanthropists and public benefactors with government grants that they never earned. These organizations can no longer be recognized under the new Act.

A Member: Are any District societies drawing a grant and not holding a show?

J. Lockie Wilson: I know of several that call themselves District Agricultural Societies; they have never held an exhibition but drew large grants.

Dr. Simmons: What money was spent in this way?

J. Lockie Wilson: These societies received grants annually of from $200 to $400 each. The Toronto Agricultural Society has been drawing a grant for a great many years, but never held an exhibition. Some one here

Main Hall, S. Victoria Agricultural Society.

was sympathizing with Societies in New Ontario. All these under the new Act in unorganized districts in New Ontario get their grants on the basis of double their expenditure. They are being well provided for, and received over $7,000 last year. I believe Agricultural Societies during the century of their existence have done more to educate the farming community than any other educational institution in Canada. The magnificent flocks and herds that graze round Ontario's farm homes are the result of the earnest, honest endeavor of the grand old pioneer members and officers of Agricultural Societies. The show ring was in the past, and will continue in the future to be the place where stockmen will receive the greatest education and encouragement, and future generations of farmers will rise up and bless those who have done so much to make Ontario the breeding ground for the finest horses, cattle, sheep, and swine in this Western World. I believe many of the young farmer boys have gone to our Fairs with little idea of what well bred, well cared for stock was, and there learned lessons by ocular demonstration of what could be done by proper care in breeding. Some who may not understand may consider our progress has been slow, but the upward climb has been sure. The old pioneer farmers who met on the Niagara Peninsula a hundred years ago and organized the first Agricultural Society and elected the first board of directors, deserve to have a monument erected to their memory. Little conception had they that in the years to come, their work would broaden until a million and a half of people would annually pass through the gates of exhibitions in this great Province; and this has all been brought about by the persistent efforts of these old pioneers and their successors. As the years go by opportunities increase for the furthering of the good work. Some times we slip back, but it is like the climbing of a steep mountain side covered with sleet. A rush forward and a slipping backward, another rush forward, again a slipping backward, but with each forward step an advance has been made and inch by inch the summit is gained. So it has been, and I trust will ever continue to be with us—ever climbing higher and higher until the goal is reached. If I read aright the future's horoscope there is a brighter day dawning on this Province, and I believe that by putting energy and efficiency into the work, with your indomitable spirit, you can and will continue to make our agricultural societies institutions of the highest possible educational value.

The CHAIRMAN: You have heard the able address of our Superintendent, Mr. Wilson. I am sure we are all indebted to him for the time and energy he has put forward in helping our Societies during the past year. I hope that in fifteen or twenty years from now our population will have increased to such an extent that we will have ten times as many people passing through our gates. And we must look forward to the enormous benefits that will accrue, not only to ourselves, but to the whole world by the efforts that we make through our Societies. I have much pleasure in returning my thanks to Mr. Wilson for his address and I will now ask you to discuss any points you wish to, in connection with it.

A MEMBER: Where you send three or four judges to a certain district, the exhibitors do not care to go from one Show to the other, because they say these judges are likely to give the same decision, and there is no use in going to the other Shows, because the judges will not change their minds. I have found that to be the case, and I would like to have your view of it.

J. LOCKIE WILSON: The arrangement of circuits is a more difficult matter than many would imagine. In the first place there is the question of expense of judges. Last year these cost $13,000. We received back

from the Societies $4,500 of this amount. Then, again, some Societies select a particular date and are unwilling to change it so as to fit in with other exhibitions in the district. This frequently involves intervening days on which our judges are idle, and this means additional expense. When possible, we try to arrange that the same judges will not act at fairs within a radius of 15 or 20 miles from each other, which means increased but unavoidable expenditure. This arrangement, however, is not always feasible, but we will bear in mind the important point which has been well raised by the last speaker. Another cause of increased expenditure to the Department is the fact that so few Societies are willing to hold their fairs on Saturdays and Mondays. During this interval judges on circuit have to be kept on, having their salaries and *per diem* expenses paid, as the cost would be greater if they went home and started out again at the beginning of the week.

D. Evans: I would like to ask Mr. Wilson, what are the number of societies in the Province that receive the maximum amount of the grant?

J. Lockie Wilson: There are only two Societies that get the limit—Guelph and Markham.

H. J. Gould: I am pleased with the Superintendent's report. In former years we had three or four hours of an address, and we got tired and went home and did no business. I can assure our Superintendent that he has our appreciation for the pointed remarks he made to-day, and for his work. I am satisfied that we can look to the Department to make a proper division of the grant, and, if we get $100,000, I am perfectly willing that our grant should stay at $800, and the rest be distributed where it will do the most good.

A. C. Graham: The location undoubtedly makes the Fair, and for that reason I feel that there should be a special grant to help those Northern Districts where the country is composed principally of ranch land, and where the people are not thickly settled.

J. W. Sheppard: What would these two Societies, Guelph and Markham, have earned if there had been no division of the grant in this way?

J. Lockie Wilson: About $200 more apiece.

The motion was then carried.

A Member: Were the provisions of the old Act broad enough to so allow the law to be abused, that forty Societies in this Province could draw grants and not hold any Fairs without violating any of the penalty clauses of the old Act?

J. Lockie Wilson: Under the old Agriculture and Arts Act the doors were pretty wide open. Township Societies were organized all over, and were given a certain amount; all the District Societies were given $380 to $800.

A Member: According to the new Act is it necessary to hold a Show to get a grant?

J. Lockie Wilson: A Society does not require to hold an Exhibition. It could purchase and keep stock, but it must do something; it can devote all its money to the purchase of pure bred stock, or it can hold an Exhibition and get a grant. The Societies that hold no Exhibition but spend their total grant for the purpose of purchasing pure-bred stock get a special grant of $1.00 per member up to $50, and they get $30 for each stallion, $20 for each bull, $10 for each boar and $5 for each ram, provided that they have been in their possession not less than nine months.

A Member: Those Societies that have been drawing a grant for the purpose of paying over to another Society are now excluded?

J. Lockie Wilson: Yes.

D. Evans: As Secretary for West Middlesex, I heard no complaints about the judges when I mailed a letter to the Secretary expressing our views, and I told him that, so far as I knew, the judges had given entire satisfaction; but when we met two weeks afterwards, we found that the Directors who were in company with the judges and saw their work were not satisfied. It is not Mr. Wilson's fault, because as he says, he mailed us a circular saying who the judges were to be, and asked us for a report on them, but we were not acquainted with these men's abilities. Sometimes the Department is not able to give the satisfaction it would like to. A man was sent to judge poultry last year who was only versed in one line, and he was not able to judge all the birds. That was a serious mistake, and he did not give satisfaction. Years ago we used to have three hundred exhibitors of poultry and they dwindled down to seventy. Some of the birds that were exhibited at our Show won prizes at New York and Boston.

A Member: It should not be discarded altogether because of one mistake or two or three. Certain men may assume upon themselves a responsibility that they cannot carry out, and I think this question of expert judging will rectify itself in the near future, and it should not be criticized too hard in its infancy.

A. F. Allen: While the Department may be criticized, and always will be no matter who are the judges, I do not think there is much ground for complaint; I never saw a judge that would give perfect satisfaction. For a number of years before we employed expert judges we had a lot of trouble, and they are giving a great deal better satisfaction than we ever had before. While they are not perfect, (and, moreover, no man can judge a lot of horses without some person being dissatisfied), yet, I believe they are so much better than the judges we used to get among our neighbors, that I have no hesitation in saying that it is one of the best things that was ever carried out; and these expert judges are doing good work, but it would be a good idea to change them every year. The worst thing for judges is for them to be too well acquainted with exhibitors.

E. Ming: I saw the expert judges coming up to our Exhibition and they ranged themselves in front of the office. They were talking one with another and one said, "Do you know so and so? He is a judge this year." "Why no," said the other, "How did he get on?" The reply was, "His member got him on." That man was not an expert judge, he was simply put on through his member. I will tell you what occurred with our judges; a fellow had a colt and he showed him down the ring with the light horses and he got first prize. By some means or other he slipped him up into the general purpose class and he got second prize there, and when it came to the heavy draft horses he was slipped in there and got third prize, all on the one colt.

A Member: He must have been a good one.

A Member: Where was the Director in charge and what was the Secretary doing when he gave out three entry tickets for the same colt in three different classes?

E. Ming: They cannot be all over. I think the expert judges are all right in their place, but there should be more care taken, and a member of the Legislature should not be allowed to influence the Department in putting a fellow on because he had some influence in his locality.

A Member: Did you pay the three prizes that were awarded the colt?

E. Ming: No.

A Member: If exhibitors are given to understand that if they do such things they will not get any prizes it would keep them from doing that kind of thing. That could not take place if the officials were firm. It certainly would not be repeated another time.

Poultry House, S. Victoria Agricultural Society.

E. Ming: Officials cannot be all over the field, and they don't know all that is going on.

A Member: Don't you have a committee to look after that kind of thing?

E. Ming: One man for general purpose horses, and another for heavy draft and so on. We have three different men.

Dr. Simmons: I agree with the speaker who said that the day of special judges is an advance as regards efficiency. It would be better if every Department had a special judge. I cannot get women that will judge fine arts at our fair and do correctly in the Dairy classes, I always associate one of the men from the Dairy Department with them. I hope there can be some arrangement made that the special judge will carry a certificate of qualification in his pocket, having passed the examination at the Short Course, or a longer course if necessary.

A Member: I thought they had to do that now?

Dr. Simmons: I understand that that is not the case; but the day will speedily come when the judges will have to show his credentials, and unless he has them we will not allow him to examine the stock. When he has got certificates of qualifications then he can give his judgment according to the best methods of judging. If it were not for the expense I would ask for fifteen judges at the West Hastings Fair next year instead of four.

A Member: You will never arrive at a time when you will get everything judged correctly.

A Member: Societies have this thing in their own hands. They have not had directors to look after the exhibits, if one man can get three prizes with one colt. At our fair, we appoint a man for light horses and a man for heavy horses, and they have to stay there and no man is allowed to show in three classes.

E. Ming: When your light horse man is looking after his classes, how is he to know that the heavy draft horses are in their places, or how is the director for the heavy-draft classes to know that a man has shown his horse in the light class which may be a quarter of a mile away?

John Brockbank: If the directors will only be straightforward and honest about it, there will be no trouble; if they find the judge is not up to the mark, they should let Mr. Wilson know at once, because he will not send a man a second time who is objectionable. It is the duty of the Board of Directors to report to Mr. Wilson if a judge does not give satisfaction; then he will be taken off. The directors have it all in their own hands.

H. Pearson: I would like to ask this gentleman where he will get a judge who will satisfy the ladies. I do not believe you can find one. We do not choose judges from the immediate neighborhood. We had one judge on a special herd of dairy cattle; he was sent out by the Department and he gave every satisfaction. The man understood his business and did his work well.

W. Fenn: If a man takes three prizes with one animal, it is the director's fault. That kind of thing has been tried at our fair, but it did not work. Exhibitors would try to make an entry for one team in the heavy draft, general purpose and agricultural team classes. If the directors made it a rule that the Secretary should not furnish more than one ticket to each team, then a man could not take more than one prize.

E. Ming: How would the Secretary know whether a man had one team or three?

A Member: Ask him.

E. Ming: I altogether differ from my friend as to lady judges. We

have lady judges in the Dairy Department, and also for ladies' work, and we pay $125 for prizes for ladies' ornamental work, and last year our lady judge gave the best satisfaction. I have been Secretary of the Lennox Fair for fifteen years and we pay out $1,500 every year. If you would ask your Superintendent here to supply a lady from Alexandria to judge your fancy work. I assure you she will give you the best satisfaction you ever had. We have had ladies year after year, but we never had one who gave such satisfaction as Mrs. McGregor, of Alexandria.

C. L. Stevens: This is the first time I have ever had the pleasure of hearing our Superintendent, and I was very much pleased and edified by his address and to know how the new Act has been working. We have had expert judges sent out by the Department and we have never had any cause to complain. Individual exhibitors are not satisfied. You cannot get any horse owner to be satisfied with a judge unless he gives him the first prize.

A. C. Graham: We have had one lady judge at our Fair in North Victoria for twenty-two years, and during that time she has given the greatest satisfaction. We have made it a rule to appoint judges from a distance, people whom we knew were intelligent, and had the ability to judge correctly and we succeeded without expert judges until the last few years. Since then we have had them, and they have given excellent satisfaction. I would suggest that a certificate be given young men who are competent to judge at fairs, and that would induce others to go to these Short Courses and learn how to become judges.

A Member: I represent the Tavistock Agricultural Society, and we have employed expert judges for a number of years with entire satisfaction. The only trouble we have had with them is that they have sometimes to get off on an early train, and cannot finish judging, and we have to hunt for some local judge, which has not been very satisfactory to us. I would like to ask Mr. Wilson if we cannot hold these judges until they have finished their work. Our classes are well filled up, and I do not think that it is right that these judges should leave before they are finished. That is the only difficulty we have had with expert judges.

J. Lockie Wilson: That is a question that is pretty difficult to answer. If you would commence your judging early in the morning, I think a judge should be able to get through so as to catch his train. If he did not do this, the next Exhibition would be without a judge, and I would suggest that, where you have a large exhibit, you begin judging early.

A Member: They do not arrive until the 11 o'clock train.

J. Lockie Wilson: Notify me this year and I will see that the judges are there early.

A Member: We make the directors say whether they are satisfied with the expert judges and also get the signature of the Secretary, and that would be a useful plan for others to adopt.

The Chairman: We have gone into this matter very fully. We will not gain anything by discussing it further, as a number of these questions which are brought up are matters which can only be dealt with between the Department and the Societies. What we want to discuss more particularly are the general principles underlying the expert judging system and not so much these individual matters.

J. Lockie Wilson: I do not think I know ten of the judges, that are sent out by the Department, but a rule was established, two or three years ago and it has never been varied since. I have had both Liberal and Conservative members come to my office and recommend judges, and I have appointed men that were recommended by both, and, as far as that is con-

cerned, you know I am not very much of a party man. The system adopted is this: If a member or a Cabinet Minister recommends a man, I always look carefully into his qualifications before appointing him. I write to him and say that it is a rule of the Department, that I shall have the names of three responsible men in his locality who will recommend him. That man sends me the names of three reputable breeders to whom I write a confidential letter. If I receive a letter from one of these men saying, "This man would not, in my opinion be a good judge," he never goes on the list. That is the system that has been adopted, and as long as I am there it will continue to be so.

A MEMBER: You cannot get a good qualified man to go out for the price you are paying them. Those who are recommended are willing to go out for $4 a day, and you cannot get a man with the proper qualifications for $4 or $6 a day.

J. LOCKIE WILSON: I would just add to that, that Societies should not apply to me for a man to take all classes of work, to judge horses, cattle, sheep, swine, and ladies' work.

The CHAIRMAN: Mr. Wilson would like to have a vote on the expert judge system. "Is the principle right or wrong?"

Dr. SIMMONS: I understand Mr. Wilson to say it has been the habit to take recommendations from individual members. I think the judges should hold a certificate of fitness for this work, or, when recommended, they should have to take a Short Course of instruction.

J. LOCKIE WILSON: I sent out a circular to all the judges in the Province asking them to attend and take the Short Course of judging at Guelph, and I am glad to say that a large number of them took advantage of it and attended. They went there and paid their own expenses and took that Short Course and I think where they have done this, that they should at least get the preference.

The CHAIRMAN: You should take a vote of this kind. We are all aware that judges are born and not altogether made, but you can take a rough stick and make a pretty good article out of it; and while there has been some criticism, I will ask you to stand by those who think the system is good and should continue. We are simply asking for an expression of opinion; it is not a formal vote. I will ask all those in favor of the system to stand up.

The great majority of the members arose.

The CHAIRMAN: No person seems to be opposed to it.

A MEMBER: I am here representing Central Bruce, and we have never tried the expert judges, and how can you expect me to vote on something we know nothing about? We discussed the matter at our Board, and we have always had good luck in selecting our judges, while at the same time we intend to try Departmental judges this year in horses and cattle. We feel that it is rather expensive to get judges for the other classes, and that is one reason why I did not vote.

The CHAIRMAN: We have not had many Departmental judges, but we have a number of men who are expert judges in every sense of the word, but they cannot spare the time to go out and work in that way for $4 a day. You have almost unanimously voted that the system is a good one.

D. EVANS: In order for a man to be a good judge, he should not only understand his work, but be honest.

A MEMBER: What is necessary to secure an appointment as expert judge? Because he is recommended by three men, does it make him an expert? They are really Government judges and not expert judges at all.

A type of Fair Stables.

Stock Sheds.

J. Lockie Wilson: The proper term would be Departmental judges. It is a great mistake to call any judge, that was ever sent out by the Department, an expert judge.

A Member: There is only one in the Province that is an expert, and that is Professor Day.

A Member: I do not know whether even he is infallible or not.

D. Hurley: I have the honor to represent the Eastern Fairs' Association. I desire to heartily thank you for endorsing the resolution that was passed at Ottawa. I hope when you go before the Minister that he will grant our request.

Dr. Simmons: As far as the Central Fairs' Association is concerned, I must say that we were favored with fine weather for our fair in 1907. We had successful Fairs in every instance, and each one was able to pay the amount of their prize list. The attendance was twenty-five per cent. more than usual, and every fair that was represented at Frankford, reported that they are satisfied, but they thought the grant should be increased.

The Chairman: Is there any one to report for the Western Fairs' Association?

A Member: Mr. Farrell will be here, we expect, to-night.

The Chairman: In my address I made reference to the death of the late T. F. Wallace, Woodbridge, and the following motion has been handed in, "Moved by Geo. Downey, seconded by W. J. Wilson, that the following be a committee to draft a resolution of condolence with the widow and family of the late T. F. Wallace, Woodbridge, namely, the mover, J. Thomas Murphy, and D. Evans."

ADDRESS.

By Hon. Nelson Monteith, Toronto.

The Minister of Agriculture took the chair, and said: It is with a great deal of pleasure that I once more meet you. Some of you, no doubt, are here as delegates for the first time, others have been close to this work and have helped to bring the Fairs' Association to its present important position. I do not desire to speak to you at great length to-night, because you have on your programme a number of live subjects that should furnish food for discussion and just as important as any definite declaration I might make. Your societies' work is one of the oldest of our lines of organized agriculture. The tendency to-day in all lines of human endeavor, apparently, is towards organization and co-operation. You belong to an ancient and honorable organization, having its birth-place over in the old Niagara District. The first effort made to organize an Agricultural Society in this Province was in the year 1793, almost the date of organized Government in the country. Since that time you have gone forward and much has been accomplished, but I believe I am safe in saying that we have lost some of the good that was part of the organization in its earliest inception; for instance, the social side of our Agricultural Society work. If you care to go back and read the records of the old Agriculture and Arts Association in this Province, you will find that at the annual gatherings our public men met at annual banquets where they discussed and reviewed the improvements made in agriculture during the previous year. This, to my mind, meant a great deal for the advance of agriculture in the various centres.

and I believe the funds of our Agricultural Society at the present time might be devoted, to some extent, to such lines with a good deal of profit. I have had the privilege and honor of being a director and president of such an organization as is here represented, and I realize that it is a cold, thankless and difficult position, hard to maintain in its dignity unless you put some such stimulus as this behind it.

I believe that I speak to people of the same make-up as myself. We have a social side to us and we love a certain amount of sociability, and, when we sup together, there appears to be a stirring of that conviviality in us that makes for the opening up of our best instincts, and, possibly, more kindly feelings towards those with whom we are associated; and for that reason, although I speak somewhat guardedly (because I do not believe in any sumptuous banquet that is going to involve enormous expenditure), I believe something can be done along that line that might forward and popularize the work of Agricultural Societies, and I just throw this out as a thought for your consideration.

Your organization covers the Province pretty thoroughly, and, besides being the oldest institution, it receives the largest financial assistance from the Government of any branch in my Department. The total expenditure in 1906 of the societies was $700,107.25. The larger proportion of this amount was expended for the encouragement and improvement of field crops, herds and flocks. We are glad to know that the sum is so large and that interest is not waning in this regard. According to the report of the Superintendent, the number of Spring Fairs last year has largely increased, the entries and attendance being much in excess of any of the previous years. The change in the Act, no doubt, has stimulated this line of work, which, I believe, is in the right direction.

The contribution of the Government towards your branch of Agriculture comes not very far from the $100,000 mark. The unfailing interest shown by the people of this Province in the work you have been and still are doing is proven by the fact that nearly a million and a half persons passed through the gates of your exhibitions in 1907.

Another line of work that has been developed in the past year, for which I see a great future in store, is Field Crop Competitions. When we consider that the field crops in this Province represent $140,000,000, we must recognize that this is a very important feature of our agricultural work. Larger production in our own field crops means ability to keep more stock and thereby an increase in almost every avenue of agricultural effort and a greater return.

Last year we inaugurated the work with a grant of $1,000. Some ten districts took part in the competition and they received prizes averaging $100 each. Three thousand acres were entered, and those who took part in the competition were able to sell their prize grain for prices averaging from 25 to 50 per cent. above the market price, showing that the people of this Province are willing to pay the price when the seed is guaranteed. We hope to increase the appropriation in this line of work, and I trust that it will meet with a reasonable response from the people of this Province. This is one of the many branches along which agriculture may be improved. There is no doubt that by this means we will deal with the weed problem and that is a serious one at this time. By inducing more people to enter into the competition we will get cleaner cultivation and greater care in the selection of seeds, and, by doing that, we will be able to accomplish greater results. I trust that during your deliberation you will solve some of the difficulties you meet with from time to time. I shall

be glad to have a body such as yours come up and advise with us as to what you think we should do at a later period in your Convention, but you must remember that this organization is only one of a great many others that are co-operating in furthering and advancing the cause of agriculture, giving it that dignity which properly belongs to a calling having such utility. I believe I have always had the courage to speak my convictions in this regard, that there is no more honorable calling than that of agriculture.

Tolstoi has said that, "Love of labor freely chosen and liked, is the nearest ideal of human happiness," and he is very close to being right. The man who likes agriculture and chooses it of his own free will, and becomes interested in it, and thereby successful, undoubtedly has a happy lot indeed. You are free from many of the worries and difficulties that daily beset men in other lines, especially in commercial work. You have a calling that lends itself readily to investigation—a calling, that the more you learn about it, the less you think you know, and when a man gets into that unhappy state that he thinks he cannot learn any more, then his position is sad indeed. Yours is the great basic calling upon which the success of this Province depends. Your progress largely makes prosperity in every other line of industry, therefore I say to you as representatives of this most ancient of organizations that you should not "weary in well doing." Put more vigor and enthusiasm in the work of your Shows during the coming year and thereby get a larger share of the funds that come from the Government, which after all, are yours, and we are only the trustees, seeing that he who worketh for them shall get them.

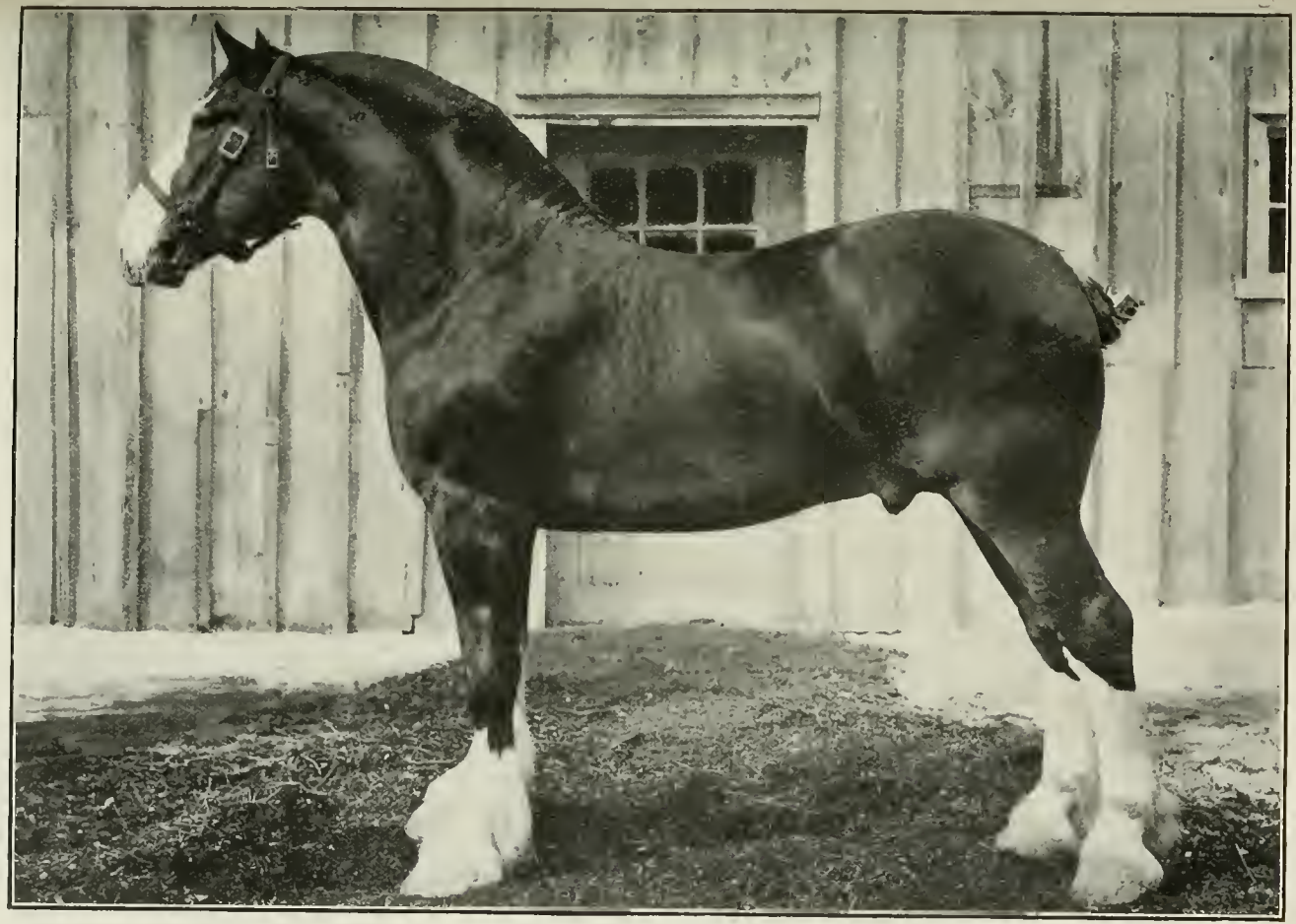
I thank you very much for having given me this privilege again of addressing you, and wish you success during the coming year.

SHOULD THE VALUE OF GROUNDS AND BUILDINGS BE TAKEN INTO CONSIDERATION?

By Elias Boughner, Simcoe.

I would like to be permitted to change, to a slight extent, the subject which has been assigned me to-night, and, instead of discussing the question, "Should the cost of the Grounds and Buildings of Agricultural Societies be taken into consideration in awarding the Government Grants?" I would look at it from this point, "Should the Value of Grounds and Buildings be taken into Consideration?" because you know that sometimes there is a good deal of difference between the cost and the value.

The subject assigned to me is one of a good deal of interest to many of the Agricultural Societies of this Province, and may be of still greater importance in future years. A grant of $70,000 or thereabouts is placed in the estimates each year by the Government, about 95 per cent. of which is expended in the holding of Agricultural Exhibitions, the remainder being granted to a few Societies which purchase pure-bred stock. As these grants have been made for many years and the money expended in this way, we may assume that this method of expenditure is satisfactory to the Government and Legislature and is their settled policy for many years to come. We may further assume that it is their wish that these Exhibitions shall be made as successful as possible, with the means at the disposal of the various Societies.



Clydsdale Stallion.

To secure a successful Exhibition, three things are of prime importance, and, if any one is entirely lacking or even deficient, I hold that no permanent success need be expected: 1st, a good membership; 2nd, a good prize list; 3rd, suitable grounds and buildings.

No Society can be successful without a good membership. By this, I don't mean that the list of members must necessarily be a large one. That will depend greatly upon the size and population of the territory your Society represents. A membership of a hundred in a township with 400 names on the assessment roll would be much greater than the same number in a township with a thousand names on the roll, as it would evidence a much greater interest in the work of the Society. Under the provisions of the old Agriculture and Arts Act, by which most of the Agricultural Societies came into existence, membership was the chief factor in determining the amount of the Legislative grant. In fact, in most instances it was the only point considered, as you are well aware. In time it began to be seen that an injustice was done to some Societies, as there were many instances where those receiving a larger grant were doing much less for the real advancement of Agricultural interests, than others with a much smaller grant. Hence an agitation arose for a change in the Act, and in this the members of the Fairs and Exhibitions' Association took a prominent part, and were successful in securing the desired change, with the result that now the amount paid by each Society for the purposes of agriculture, as set forth in section 9 of the new Act, is the chief factor in determining the amount of the Legislative grant to each Society. I believe there are very few who will now question the desirability of some such changes. There can be no doubt that the present method is an improvement.

In the second place, a good prize list is a necessity to the success of an Agricultural Exhibition. It may not necessarily be a very large one, but should be well adapted to the locality and the conditions, financial and otherwise, of the Society. Then there must be suitable grounds and buildings. Without these, no Society can reasonably expect to be permanently successful. They are quite as essential as either of the others. A new Society just organized in the newly settled part of the Province, or a Society that, through conflagration or some other misfortune, has lost its buildings, may dwell in tents for a year or two, but permanent success can only be secured by the erection and maintenance of suitable buildings.

In my own experience I have found this to be true. I have in mind a familiar instance in our own county, where a township Society practically surrounded by stronger Societies would have been out of business many years ago but for a lucky incident which brought a few hundred dollars into the Treasury and enabled the Directors to build and improve their grounds. This Society is to-day doing good work and is represented here. Other instances could be given, but I am sure the observation of experienced workers is sufficient proof.

While I was strongly in favor of a change from the old method of distributing the Government grant, and believe the new one is a great improvement, I confess to a feeling of surprise and disappointment that no provision is made to increase the grant to those Societies which have in the past, or will in the future, secure suitable grounds, and buildings, and thus add greatly to the interest and the success of their Exhibitions. Having given the subject considerable thought, I have arrived at the conclusion that the present arrangement is decidedly unfair to the progressive Societies. Let me illustrate by stating the conditions of three Societies with whose work I am somewhat familiar. No. 1 has a name but no local

habitation, or, at least, it had none prior to the passing of the new Act. It changed about from year to year, using the grounds and buildings of the local Societies. Not a dollar of capital was permanently invested in this way. There was nothing to deteriorate by lapse of time and wear of the weather, no insurance to pay and no risk of loss on the part you cannot insure.

No. 2 has a small ground with tumble-down pens for the sheep and swine around a part of the grounds and no shelter for stock of any kind; a hall that will hold perhaps half the exhibits in horticulture, dairy, domestic, fine arts, etc., the remainder being stowed away in tents.

No. 3 has large grounds nicely kept, beautified by shade trees and with buildings sufficient to display all exhibits to good advantage, and to shelter live stock in unfavorable weather. This represents an outlay of $16,000 at a moderate estimate, which at 5% means an annual cost of $800.

Now, under the present arrangement either of the two before mentioned may receive from the Legislative grant a larger sum than the third, and, as a matter of fact, they did receive nearly as much. Is it fair? Is it right? I hold that it is not.

The first mentioned has no capital invested, the second, perhaps, $1,500, and the third, at least, $16,000. As the Government and Legislature are evidently favorable to the holding of Agricultural Exhibitions, and from year to year vote a large amount to assist the Societies in carrying on this work, and as this outlay of Provincial Funds can only be justified by the success of the shows, and as suitable grounds and buildings are necessary for the successful carrying on of this work, then it is a reasonable conclusion that the Legislature should appropriate such an amount annually to be apportioned to each Society, on the basis of the value of the grounds and buildings, as will encourage those that are deficient in this respect to improve their position and increase their efficiency by enlarging or otherwise improving their accommodations, and will at the same time, to at least a small extent, improve the financial position of those who have already incurred large expenditures, and, in some instances, large liabilities for these purposes.

In the report of the annual meeting of this Association last year, I find that I am credited with having said, in reference to this question, "I am willing to leave it to the wisdom of the Minister of Agriculture to work out a scheme by which a percentage could be paid to the Societies for this purpose." I say the same to-night.

But that some, who perhaps have given little thought to this matter, may see how easily it could be done, I will, with your permission, enlarge upon this part of the subject to a certain extent. I find that 360 Societies shared in the Legislative grant for 1907. From a return received from the Superintendent, I find that 127 of these Societies have nothing invested in grounds and buildings, or have reported nothing, leaving 233 with investments ranging from $10 to $19,000, with an aggregate of about one-half a million dollars. Of those, 47 Societies report less than $500, 50 from $500 to $1,000, 54 from $1,000 to $2,000, 49 from $2,000 to $4,000, 25 from $4,000 to $10,000, and 8 above $10,000. I would like to see 5 per cent. paid upon the amount invested by each Society up to a certain limit. I have, no doubt, the Minister would find it necessary to fix a maximum proportionate to the work done by the Society in other lines beyond which he would not go. I will not presume to say where it should be, though I have ideas of my own on the subject. Suffice to say that in my opinion a grant of $20,000 would, at present, be quite sufficient, and would

practically pay the interest upon the sum invested. This would encourage building and otherwise improve the holdings of the Societies, and the work due would amply repay the outlay. The present appears to be an opportune time to press the subject upon the attention of the Government.

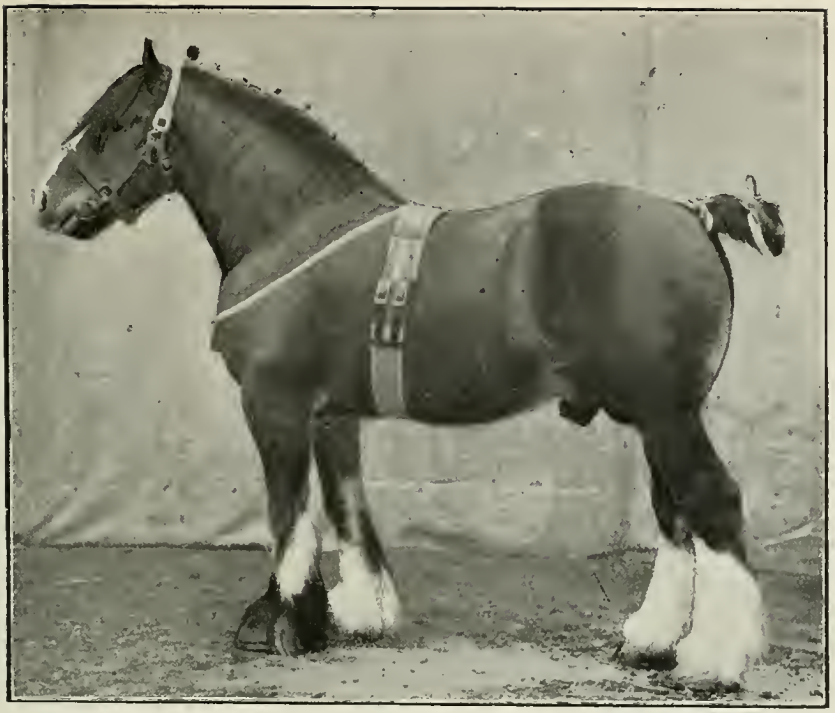
I have noticed with much satisfaction, the change made in the distribution of the Legislative grant to Public Schools, whereby the equipment figures are a factor in determining the amount of the grant. The same has been a determining factor in the High Schools for many years. Our Agricultural Shows are, or ought to be, educational institutions. If they are not educative in the true sense of the term, their usefulness has departed. In this address I am only asking for what should have been incorporated in the new Act to make it fair and equitable to all the Societies. Simply adopt the principles of payment for equipment, as in the High and Public Schools, and the details can easily be worked out.

J. B. Gould: I move a vote of thanks to Mr. Boughner for the care and trouble he has gone to in laying his views before the Convention.

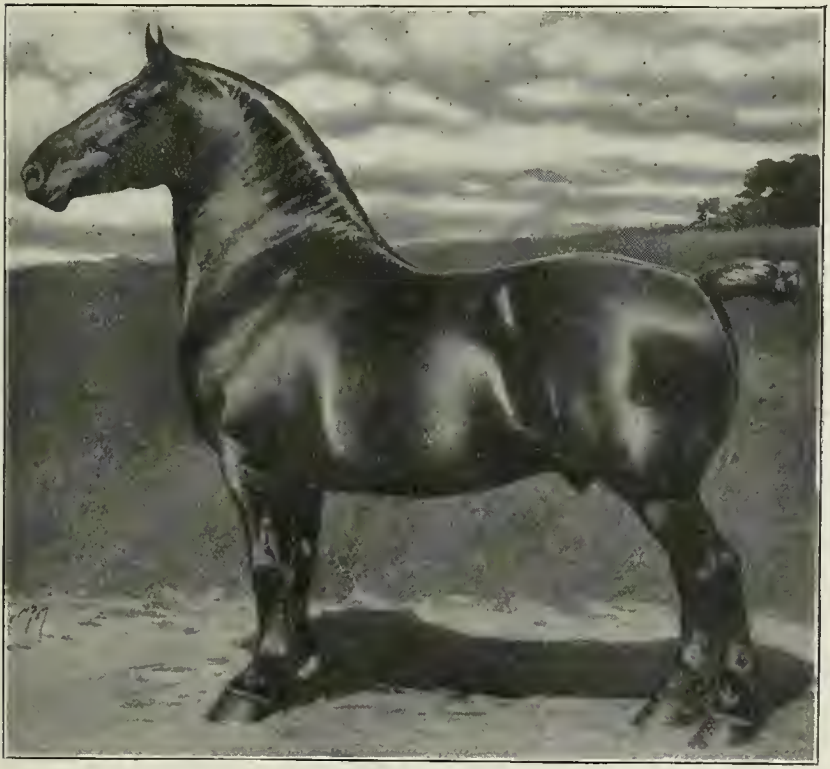
A. C. Graham: I second the motion. Carried.

J. B. Gould: I fancy a good many of us do not agree with all that is contained in that paper. Many years ago we found it a difficult matter to secure accommodation, where we could house our stock and get proper grounds to show. A number of us situated around the town of Uxbridge agreed to go down into our own pockets, form a Park Driving Association and spend our money in putting up buildings which we would rent to the Agricultural Society. We spent $3,000 on these buildings and rented them to the Society, but it was so poor that it could not pay very much rent, and we kept going back from year to year, our interest and insurance was so much and it had to be met, and it had to come out of the stock-holders of this Park Driving Club. The result was that as we went on from time to time, we found that the Agricultural Society was not able to take over the property, and then we made overtures to our own town and the Council bought the property from our Company for $1,600. It had cost us $3,000, so that the money we spent in that property, that cost us $3,000 only represented $1,600 to the town, and not 16 cents as far as the Agricultural Society was concerned. Now the Agricultural Society rents it from the town and pays an amount of rent which is equivalent to the interest and the insurance upon these buildings. Therefore, I say that we have just as much right to be considered in the division of the grant, as the institutions that own their own plant and their own buildings. I do not see that these are the people that are doing the most good for the general interest of the public. If one Society is so unfortunate that it cannot have its own buildings, I do not say that they do not give more money for prizes and are doing more good for the farming community, than the people that own all these buildings, so it would be wrong for us to say here that we unanimously accept that principle.

A Member: We discussed this question fully some years ago, and agreed that the grant should be given for expenditure for purely agricultural purposes. That was the principle we arrived at on that occasion, and we were right. I have in my mind a society that, a few years ago, went to work and built tracks and put up fences, and mortgaged the property hopelessly; if you give a grant on the price of the grounds and buildings, you will be putting a premium on that sort of thing. We had better leave it the way it is. We need a lot of things to run the show. If you give a Government grant for buildings you should give a grant for printing and other things. A number of our Societies took great interest in the seed



Shire Stallion.



Percheron Stallion.

business. We had a competitor this year that shipped some seed to Scotland, and he secured $2.45 per bushel for Siberian Oats. We own our buildings and our grounds, and our Society has grown to double the size it was three years ago, and we are just thinking of buying more ground, three times as large. It would be unwise to give a grant on the value of the ground.

NEIL MCDOUGALD: I agree thoroughly with the last speaker. I think it would be very unfair to give a grant on the amount spent for buildings. A great number of old Societies have their buildings paid for, and it was easier for them than it will be for us, considering the increased cost of material. A great many of you can improve your circumstances by having your townhips and county council give you a grant, and they will do so if you ask for it. I fully expect that the increased grant you are asking for from the Government, will be given, if we go after it in the full strength we have got. We have the strongest organization in the Province to-day, and if we use our strength we will get the grant. If the Minister of Agriculture absolutely refuses the petition that goes up there to-morrow, I would pay no attention to him. Get after your members; there is not one out of ten of the members from the rural districts, who are not giving a special amount to the Societies. I know that is the way in Bruce. Our members gave $10 a piece to every Society in the riding. We do not care whether the Government refuses it or not, we are going to get it any way Go after the Township and County Councils; every one of them will give you $100. It would be unfair to distribute this grant and compel us, who have paid for our buildings and grounds, to come in and help you who have not done so.

D. BARR: If we could get the money the way the last speaker said, we would not need to go to the Government. I agree with Mr. Boughner that, where the Society is expending a lot of money and putting up buildings, and has good grounds, it ought to get some interest for its money. I move that the amount to be named by the Minister of Agriculture be paid to the different Societies throughout the Province, to help pay those who have expended their money in their grounds and surroundings.

A MEMBER: This year we secured grounds and we spent $1,100 on them and I am satisfied to let the grant come in as it has for the last year or two and we will get buildings on these grounds. How are you going to get the value of these buildings? Who is going to value them? I believe, when we get our ground for agricultural purposes, that it is our duty to get to work and get funds to erect buildings.

W. COLLIER: It is the business of the Directors of the Agricultural Societies to provide grounds. We provide them the cheapest way we can. If we thought it was the cheapest way to raise the money to buy the grounds, all very well, and if we rent grounds that is another way to come at it. We can take our choice, and I do not think there will be any premium given to those who see fit to purchase their grounds and buildings.

D. BARR: I would like to ask Mr. Collier whether he charges up the rent he pays as money expended for agricultural purposes.

W. COLLIER: No.

J. B. GOULD: The few remarks I have got to make on this question are from a very disinterested point of view, because I represent one of the two Societies that get all they can out of the Government. You cannot have a good fair unless you have a good crowd. At one time I held similar views to my friend from Simcoe. We struggled into debt to buy grounds and I run across a man who had been on a Fair Board twenty

years and I said to him, "Your Fair ought to get out of the rut; you have no grounds or buildings and you are not doing anything," and he said, "We are satisfied with it. We are doing a little good in our township." I said, "Look at your prize list," and he said, "Of course it don't come up to yours because we have not the crowd. We are doing a little more good than you are. We do not give 10 or 15 or 25 dollars for prizes, but we give $3, and at one time thought we would step out and give more, and what was the consequence? We were cursed with the professional exhibitor." I cannot say we are doing any more than this little township fair, where they have no grounds at all and use a shed or something in which to put their agricultural products. Everybody in the township takes an interest in this fair. All the stock is from that township, and that encourages our boys and girls, and we get better stock in consequence. You must take this into consideration. I do not think we should take away from these fairs, because they are doing a good work, and the big fairs are getting a sufficient amount from the Government in proportion to the work they do. We have buildings valued at $5,000, and we propose to invest $5,000 more this year. Why are we doing it? It is not on account of the grounds, but because we are situated close to this city of Toronto, and location goes a good deal towards making a good fair. The distribution is all right now, and if we can get a further increased grant we can leave that to be distributed among those who are trying to do better.

O. Wilcox: We, in the west, are interested in this question, and it will be rather difficult for the Department to work out such a division. In the first place, it would not be easy to arrive at an accurate estimate of the value of the buildings of the Agricultural Societies in the Province of Ontario, and if the Societies that owned their buildings and grounds should receive 5 per cent. upon what they have put into them, and those who have not got buildings and grounds should not be paid anything, it would hardly pay to touch the Act, because it would mean the same thing. If the Department should see their way clear to increase that grant from $70,000 to $80,000 or $100,000, as I believe this Association intends to ask them to do, that is the best thing, and not to make any change in the Act. The resolution would be practically the same. If we adopted the principles laid down in this paper it would make a number of complications that would always be causing trouble. Some Societies would be putting an estimate on an old shack, that was worth very little, of three or four thousand dollars, and we would have the same differences of opinion on that matter that we had on the great horse-racing question which we have been discussing here for the last two or three years.

W. E. Stock: No Agricultural Society is doing its duty unless it has good buildings and grounds, and Mr. Boughner is quite right in saying that the Government should do something for the Societies that are enterprising enough to invest some money in getting good buildings and grounds. The Society that invests in good buildings and grounds should get some remuneration—one-third or one-quarter of the cost of the erection of the buildings.

D. Evans: I agree with the trend of the able paper which my friend has laid before you. I wish to approach this subject from a different standpoint from that which the others have done. I would like to speak of the educational advantages that would accrue from the Society that has good buildings in comparison with the Society that has none. In inclement weather nobody can go to a show where they have no buildings. I do not think there is a single delegate in this audience that would not agree with

that. Something ought to go to a Society that has put up buildings costing from $6,000 to $10,000. If we are going to get a grant from the Government, from an educational standpoint, then we ought to get something for grounds and buildings.

W. Channon: Some Societies may owe $500 or $600 on their grounds and buildings, and they are paying interest. They should share equally with the Societies that pay rent, and, if the Government compensates those who are paying rent, they should compensate the others, and I am in harmony very strongly with the idea of increasing the Government grant from $70,000 to $100,000 and then apportioning it out in some fair way as they are doing it at the present time.

A Member: If we ask the Government to give us a little more assistance that is all we should do. I have listened to the different speakers and some of them want to get a little better show than the others. We have considerable building yet to do; we have some buildings erected and we have our grounds. We all have to hustle, and any of you who have not got buildings will have to get to work if you want them. You will all receive the same proportion from the Government. We made a bee and got volunteers to build our track and some of our buildings, and any of you could get buildings if you went about it in the proper way. I move that we ask the Government to provide the money in the same way that they have done in the past; that is the best way.

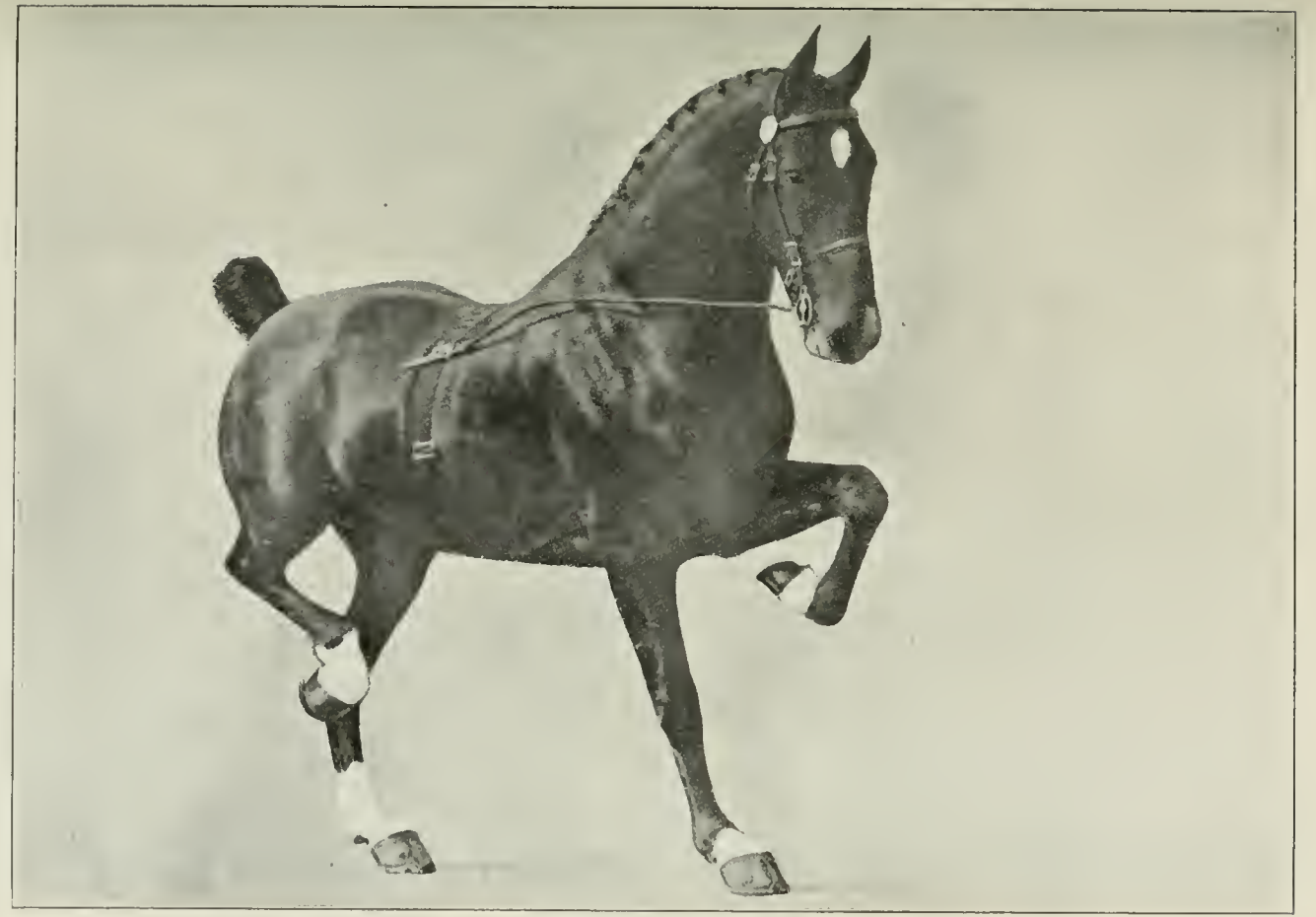
R. J. Sproule: I second Mr. Barr's motion that the grant be distributed in the way it is at present, and that those who have erected buildings and purchased grounds should receive a grant accordingly. We have tried every year to improve our grounds and make them more comfortable and convenient and to hold our Exhibition in a proper way, and it would be very unfair that these Societies, when they put forth efforts like that, should be debarred from getting credit for the work they have done. There would not be any trouble in getting the proper value of the buildings. This could be done by valuators of Loan Companies.

E. Boughner: I would like to reply to a few of the points that have been raised. I am pleased that this paper has drawn out so much discussion, but it has been considerably misunderstood by a number of those present. I am sure that when you read that paper in print and think it over carefully, a lot of misconception concerning it will be removed. I was a delegate to the Convention when this question of dividing the grant was taken up, but owing to a terrific snow-storm I was snow-bound and could not get through. I did not imagine that everybody was going to fall in with my ideas to-night. I expected that a large majority at this Convention would not agree with some of the points I have raised, but I am satisfied, after having given it considerable thought, that there are some good things in it. If you expect to accomplish any good you must get it started and get it going, and I am satisfied that I have started something that will be kept going in the years to come. I have no doubt it will be eventually adopted. If you are willing that grounds and buildings shall be taken into consideration I am ready to leave the details to the Minister.

D. Barr: In the Agricultural returns they ask, "Do you own your grounds, how much are they worth?" and so on. Why do they ask those questions?

The Chairman: It is valuable information for the people to know how much money is invested in grounds and buildings.

E. Boughner: In view of the discussion, it seems to me it would be



Hackney Stallion.

advisable to let the matter rest for the present, and let this motion be withdrawn.

J. W. Sheppard: I do not think we can vote on this question intelligently at the present time, and I believe it is not the intention of Mr. Boughner to force this matter upon his Convention now. He has merely placed his views before you so that the seed may be planted and produce something in the future, and I move that this resolution be withdrawn.

The Chairman: We have a motion and an amendment before the meeting and we had better deal with the matter. The motion was that any increase that might be secured should be divided as at the present time, and the amendment was that five per cent. should be paid on buildings and equipment.

J. W. Sheppard: I move an amendment that no action be taken on the present motion.

Motion seconded by D. Evans.

The Chairman: The original motion is very much like the amendment to the amendment. It works out in the same way; we will, however, put the amendment to the amendment, that no action be taken in regard to this matter at this meeting.

61 voted in favor of the amendment to the amendment.

The Chairman: I will now ask all in favor of five per cent. being allowed on buildings to vote.

5 voted.

The original motion was then put and carried almost unanimously.

SHOULD THE CLASSIFICATION OF HORSES ON PRIZE LISTS BE CHANGED AND A MAXIMUM WEIGHT FIXED?

By John Brockbank, Paris

The question assigned to me is of more importance than any that has yet been brought up. You will all agree with me that we should have a change. It seems to me that we give prizes to the same type of horses in all three classes, only graded in size, and we leave out one of the most important horses we have in the country, and that is the general purpose horse. He is fit for express work or farm work, and we keep them away from our fairs, by offering prizes for heavier horses only. Now, we should see that these horses are judged in their proper place; that a horse that represents the type required is the most suitable horse for that class. Some of our fairs offer prizes for heavy draught and agricultural horses, and others for heavy draughts and general purpose.

I have been asked a good many times, as I have no doubt many of you have, "What is the difference between a general purpose and an agricultural horse?" At a great many shows they have three classes and of the same type, only graded in size, and the general purpose is left out and the agricultural horse is taken in. Where they have the agricultural class the judges give the prizes to general purpose horses rather than to the agricultural type. We ought to impress upon them the fact that they should judge according to type. An agricultural horse is for heavy farm work. On many of our farms they do not have the heavy draught at all. I do not consider that a horse is a draught animal if he weighs below sixteen hundred pounds. They should be classed from sixteen hundred

up, some prize lists call for horses fourteen hundred. We should grade them up by weight as well as type, and the general purpose horse should be from eleven fifty to twelve fifty, the agricultural horse from fourteen hundred to fifteen hundred, and the heavy draught from sixteen hundred up. At some of our Fall Fairs they have heavy draughts, but they do not insist upon having them weighty enough.

A MEMBER: What class would you put a horse in weighing between 1,250 and 1,400 lbs.?

A.—He would make a very good express horse, one that is in demand more than any other at the present time.

W. CHANNON: You quote from 1,150 to 1,250 lbs., and then from 1,400 to 1,500, and then 1,600 and over. There is 150 pounds between the first two, and that would necessitate another class.

JNO. BROCKBANK: I am giving you that margin to work on. You can describe a general purpose horse as weighing from 1,150 to 1,300 lbs. You will get the right type of horse, one that is fit to do anything at all. Of course it will be necessary for every man to bring a certificate of the weight of his team, but that is not a very great hardship, as every town has scales, where they can get weighed for ten cents.

The CHAIRMAN: You make three classes, the general purpose, the agricultural and the heavy draught; the general purpose from 1,150 to 1,300 lbs., and the agricultural 1,350 or 1,400 to 1,500 lbs. Say from 1,300 to 1,600 lbs.

JNO. BROCKBANK: And 1,600 lbs. and over, for the draught. I do not consider that he is a draught horse if he is below that. The general purpose is the most useful horse we have got, and, while not wanting to run down the heavy horse, I say that in trying to breed it we have lost sight of the general purpose horse that is in great demand to-day. If you go out to buy a good delivery or express horse you can scarcely get them. You have not to take blocks, and they do not represent that class of horse at all. I want a nice, clean, upstanding horse that will weigh from 1,150 to 1,250 or 1,300 lbs., and that is the most useful horse we have got in the country.

Q.—How would you breed them?

A.—Out of a good big mare and by a Thoroughbred horse. Give me a first-class Clyde mare with good hard legs and nice, clean joints, as big as you can get, and a good Thoroughbred horse. We cannot get too much warm blood. You have too much cold blood now.

Q.—What will you have in the next cross?

A.—You can keep on with your Thoroughbred.

Q.—Where are you going to get your mares?

A.—Keep on with your Thoroughbreds, you cannot get too much of that.

A MEMBER: In Western Ontario we have the General Purpose horse. It weighs not less than 1,200 or more than 1,400 lbs. Agricultural Horses should run from 1,400 to 1,550 lbs., and draught horses from 1,550 lbs. up. Exhibitors must bring weight certificates with them. We have 10 fairs in our District, and we will not make any change.

R. J. SPROULE: What do you do with a horse under 1,200?

A.—It is a Roadster.

A MEMBER: When you get a horse weighing 1,400 lbs., you have one too heavy to do much road work. The scarcest horse in the country to-day is the express horse. I have tried to buy him for the Dominion Express Company, and to get the right type of the express horse you want one weighing about 1,300 lbs., with good bone and appearance, and we

pay a good price for them. The Company that want that class of horse won't stop at the price; we want them weighing from 1,200 to 1,300 lbs.

Q.—What do you pay for these horses?

A.—All the way from $175 to $275. If we get a good horse that has a good appearance, weighing 1,300 lbs. with good bone and feet, with a short back, well coupled up, a nice head and neck and standing 16 hands, that horse is worth big money.

Q.—How are they obtained?

A.—Principally by a cross with a good big coach horse, weighing 1,300 to 1,400 lbs., and an average mare.

Q.—Small mare?

A.—A mare of small type, compactly built, and with good bone—what we call native mares.

W. Chanxon: The matter under discussion is not a question of breeding so much as to make a standard of weight for two or three different classes of horses so that judges may intelligently judge each class. In our own Fair we have this standard: General Purpose up to 1,200 lbs., and Agricultural from 1,200 to 1,500. General purpose should be put up to 1,250; agricultural horses would run from 1,250 to 1,500, and Heavy Draughts from 1,500 up. Take a horse weighing 1,600, when not up in flesh, if you feed it up, you will have a very heavy horse, and very few of them would be found in the show ring.

A Member: I do not think you can compel a man to spend 10 cents to weigh his team; they think that we are taxing them enough when they pay $1 to enter. Every Society has not scales at its doors, and it is something that cannot be carried about.

Jno. Brockbank: We have been driving the General Purpose horses out altogether. I have been east, west, north, south, and have found the same thing. I have been trying to buy express horses and cannot get them.

A Member: In the show that I represent we call for 2,600 lbs. for a team of general purpose horses. That is not too heavy for such a team. I do not consider a horse weighing 1,100 lbs., a general purpose horse.

A Member: What is meant by a general purpose horse?

A.—A horse that you can hitch to a wagon and also to a buggy.

Q.—What would you do with a horse weighing 1,400 lbs., in a buggy?

A.—A horse weighing that much should not go on the road, it is too heavy.

A Member: We leave it to the direction of the judge as to what the horse should weigh. If we are to discuss the breeding of these horses it will take us a long time.

D. Evans: Weights do not always tell, because conformation and other things enter into the matter. An exhibitor who is not an extra good judge may enter his horse in the Agricultural class, while the judge would say that it should be in the Heavy Draught class. If you set the weight it would be a guide to the exhibitor, and the exhibitors would know where they stand.

W. E. Stock: The best thing is to get a competent judge and let him tell you whether the horse should be in one class or the other. The horse's gait has as much to do with it as the weight.

A Member: This question of the weight of horses is a very good one, but exhibitors should be given due consideration, and you will find that even judges have difficulty in putting horses in their proper class. I think the weighing of horses is a very good point.

The Hon. Mr. Monteith: While our discussion has not been conclusive for various reasons, I trust that this question will be taken up again next year, and it may possibly come up in another form, when our ideas may be better matured.

Hunter's type.

The President: There was a motion laid on the table yesterday which I forgot to put to the meeting. It is as follows:

Moved by Alex. Garvie, seconded by John Black: "That the Government be requested to change the hour for holding the annual meetings of Agricultural Societies in rural districts from 1 p.m., to any time between one and three p.m." Carried.

RESOLUTION OF CONDOLENCE.

The following resolution of condolence with the widow and family of late Mr. T. F. Wallace was then introduced and ordered to be engrossed and forwarded to Mrs. Wallace:

"Moved by George Downey and seconded, that we, the members of the Ontario Association of Fairs and Exhibitions in Convention assembled, beg to convey to you, Madam, and your family our deepest sympathy with you in the sad trial that has befallen you, in the loss of your beloved husband and father." Carried.

REPLY TO PRESIDENT'S ADDRESS.

By Alex. MacDonald, Shelburne.

The speaker prefaced his remarks by explaining that he had been snow-bound on the railway, and could not arrive soon enough to speak at the first session:

In rising to reply to the address of the President, I wish to confine my remarks, as nearly as possible, to such matters as may tend to the upbuilding of the great Institution of which we form a part.

While it is true that we receive annually from the Government a very handsome grant, yet, at the same time are we satisfying them by the proper expenditure of the same? I believe I can say without fear of contradiction that the aid received along that line is being judiciously expended. We are, and have a right to be, proud of the wealth of our country. I think of the great revenue derived from our forests, mines, fisheries and our splendid farms. But just here comes the question—what would all those avail were it not for the magic hand of labor? Our sturdy Canadians delve into the bowels of the earth and bring forth those hidden treasures; push their way into the heart of our great forests and there fell the mighty timbers reared for the work of man; sail our great lakes and take from them the wealth derived from that occupation; they work our farms and put on the market the products so that the millions may have plenty.

Verily our assets are phenomenal, yet to my mind the greatest asset of our country is our boys and girls of to-day who are to be the men and the women of the future. Are we, as agriculturists, doing our duty to develop in those young minds the noble traits of character which are essential to make them good citizens? I implore of you to press your boys and girls into the service, in connection with the great work we are carrying on, for there is much to be learned. In appointing your Boards of Directors, get the young men to act, if possible. The Government has seen fit to limit the number of Directors for each Fair, but to my mind the number we can place on the Board is too small. Take the average Fair, and we find it divided into from thirty to thirty-five different classes, and it is more than necessary that a Director should have charge of each class, and this would give our young men a splendid opportunity to take a prominent part. My experience is, that in the Fair in which I am keenly interested, our young men have done grand work, and we are more than anxious to see that as many as possible of them shall be interested in our welfare. Then consider the very important part taken by the mothers and daughters of our land towards making our Fairs a great success. If it were not for the work they do, our Fairs would not amount to very much. We should let them know that we appreciate their efforts and do all we can to encourage them in the good work.

Then get your schools interested. A great work can be done by encouraging the teachers and pupils in the different sections to take a keen interest in your Fairs. In our Society we look upon our school exhibit as being one of our great drawing cards. We find each year that more space is required for the exhibits brought forward by our schools.

Mention has been made as to the distribution of the Government grant under the new Act. To my mind, it is too soon to advocate any change along that line. The present system has a tendency to encourage a keen spirit of competition by making the distribution of grants according to the

amounts spent for agricultural purposes. It is an old and true saying that, "Competition is the life of trade." For instance, the Society to which I belong drew under the old Act, on an average from $125 to $130 per year, and now under the new Act our grant was $233, the largest paid to any Society in Dufferin County. The same will apply to any others that are putting forth an effort to expend their money largely for agricultural purposes.

It has been said that the twentieth century belongs to Canada. Let this be the watchward, "Canada for the Canadians." Our lot has been cast in pleasant places. We belong to a Dominion that is looked upon as being the brightest gem in the British crown. Therefore, it behoves us as true born Canadians to be ever ready at all times with willing hearts and strong right arm to uphold the honor and the dignity of the land which gave us birth.

Mention was made in the President's address that this is a fitting time to erect a memorial to mark our veneration for those early pioneers who laid the foundation of our present greatness. Would that our forefathers of, say 75 years ago, could rise up and view the progress that has been made in this fair Province. Methinks we would hear them say, "Well done." All honor to the noble part they played. Their memory is ever before us. What, therefore, is the need of erecting any memorials?

"Emblazoned for ever in the starry light are the paths of the living dead
What one of us would not follow them with sounding and valiant tread?
And when our country demands her sons, to the summons shall come the cry,
From loyal hearts and from passionate lips: "Canada, here am I!"

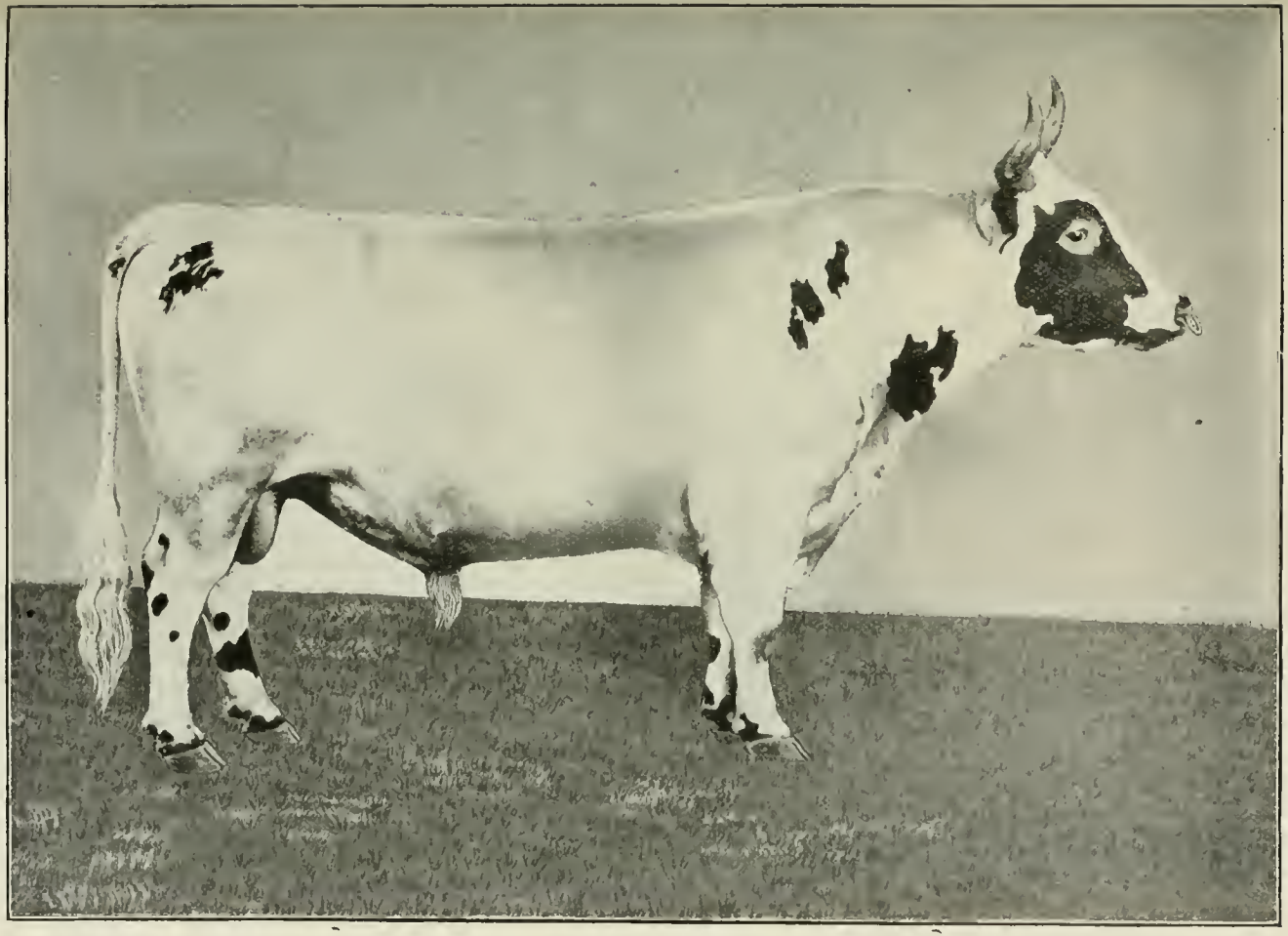
SCALE OF POINTS FOR AYRSHIRE BULL.

HEAD		16
	Forehead—broad and clearly defined	2
	Horn—strong at base, set wide apart inclining upward	1
	Face—of medium length, clean cut, showing facial veins	2
	Muzzle—broad and strong without coarseness	1
	Nostrils—large and open	2
	Jaws—wide at the base and strong	1
	Eyes—moderately large, full and bright	3
	Ears—of medium size and fine, carried alert	1
	Expression—full of vigor, resolution and masculinity	3
NECK:	Of medium length, somewhat arched, large and strong in the muscles on top, inclined to flatness on sides, enlarging symmetrically towards the shoulders, throat clean and free from loose skin	10
FORE QUARTERS		15
	Shoulders—strong, smoothly blending into body, with good distance through from point to point and fine on top	3
	Chest—low, deep and full between and back of fore legs	8
	Brisket—light, not too prominent and with very little dewlap	2
	Legs and Feet—legs well apart, straight and short, shanks fine and smooth; joints firm; feet of medium size, round, solid and deep	2

BODY		18
Back—short and straight, chine strongly developed and open-jointed	5	
Loin—broad, strong and level		
Ribs—long, broad, wide apart and well sprung	4	
Abdomen—large and deep; trimly held up with strong muscular development	4	
Flank—thin and arching	1	
HIND QUARTERS		16
Rump—level, long from hooks to pin bones	5	
Hooks—medium distance apart, proportionately narrower than in female	2	
Pin Bones—high, wide apart	2	
Thighs—thin, long and wide apart in proportion to rest of animal	4	
Tail—fine, long and set on a level with the back	1	
Legs and Feet—straight, set well apart, shanks fine and smooth; feet medium size, round, solid and deep	2	
SCROTUM:—Well developed and strongly carried		3
Rudimentaries, Veins, etc.—teats of uniform size, squarely placed, wide apart and free from scrotum; veins long, large, tortuous with extensions entering large orifices; escutcheon pronounced and covering a large surface		4
COLOR:—Red of any shade, brown or these with white; mahogany and white, or white; each color distinctly defined		3
COVERING		6
Skin—medium thickness, mellow and elastic	3	
Hair—soft and fine	2	
Secretions—oily, of rich brown or yellow color	1	
STYLE:—Active, vigorous, showing strong masculine character, temperament inclined to nervousness but not irritable or vicious		5
Weight at maturity not less than 1,500 pounds		4
Total		100

SCALE OF POINTS FOR AYRSHIRE COW.

HEAD		10
Forehead—broad and clearly defined	1	
Horns—wide set on and inclining upward	1	
Face—of medium length, slightly dished, clean-cut, showing veins	2	
Muzzle—broad and strong without coarseness, nostrils large	1	
Jaws—wide at the base and strong	1	
Eyes—full and bright with placid expression	3	
Ears—of medium size and fine, carried alert	1	
NECK:—Fine throughout, throat clean, neatly joined to head and shoulders, of good length, moderately thin, nearly free from loose skin, elegant in bearing		3



Ayrshire Bull.

FORE QUARTERS 10

Shoulders—light, good distance through from point to point, but sharp at withers smoothly blending into body... 2

Chest—low, deep and full between and back of forelegs..... 6

Brisket—light 1

Legs and Feet—legs straight and short, well apart, shanks fine and smooth, joints firm; feet demium size, round, solid and deep 1

BODY 13

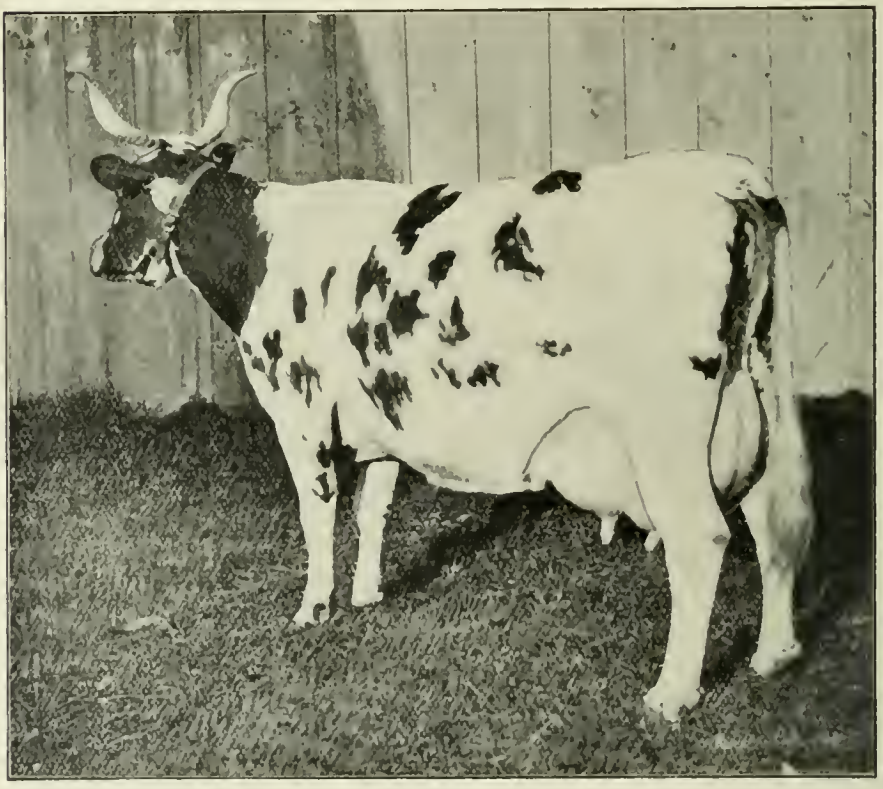
Back—strong and straight, chine clean, sharp, and open-jointed 4

Loin—broad, strong and level 2

Ribs—long, broad and wide apart 3

Abdomen—capacious, deep, firmly held up with strong muscular development 3

Flank—thin and arching 1



Ayrshire Cow.

HIND QUARTERS 11

Rump—wide, level and long from hooks to pinbones 3

Hooks—wide apart and not unduly overlaid with fat 2

Pin Bones—high and wide apart 1

Thighs—thin, long and wide apart 2

Tail—long, fine, set on a level with the back..... 1

Legs and Feet—legs strong, short, straight when viewed from behind and set well apart; shanks fine and smooth; joints firm; feet medium size, round, solid and deep. ... 2

UDDER:—Long, wide, deep but not pendulous, nor fleshy; firmly attached to the body, extending well up behind and far forward; quarters even; sole nearly level and not indented between teats; udder veins well developed and plainly visible..... 22

TEATS:—Evenly placed, distance apart from side to side equal to half the breadth of udder, from back to front equal to one-third the length; length 2½ to 3½ inches, thickness in keeping with length; hanging perpendicular and slightly tapering 8

MAMMARY VEINS:—Large, long, tortuous branching and entering large orifices 5

ESCUTCHEON:—Distinctly defined, spreading over thighs and extending well upward 2

COLOR:—Red of any shade, brown or these with white; mahogany and white, or white; each color distinctly defined. (Brindle markings allowed but not desirable) 2

COVERING 6

Skin—of medium thickness, mellow and elastic 3

Hair—soft and fine 2

Secretion—oily, of rich brown or yellow color 1

STYLE:—Alert, vigorous, showing strong character; temperament inclined to nervousness but still docile 4

Weight at maturity not less than one thousand pounds 4

Total 100

SHOULD A PROVINCIAL AUDITOR OF FAIR BOOKS BE APPOINTED?

By H. J. GOULD, UXBRIDGE.

Some few weeks ago I received a letter from our Superintendent stating that they had put me down for an address upon the subject, "Should a Provincial Auditor of Fair Books be Appointed?" I was surprised that the request should come to me, because there are many others more capable, who have a much wider range of experience, and I wondered why this question should be put on the programme, because I have heard little or no agitation for it. I had a personal interview with Mr. Wilson, and during our conversation I was informed that there was need, in some parts of the Province, to have the assistance of an outside auditor. It was thought that one might be taken from the Department who had been accustomed to taking charge of the various statements received by the Department from the Societies. I was also informed that a number of these statements were not what they ought to be, and no doubt it is caused by the lack of experience and want of uniformity in keeping the books. These discrepancies were more marked in the newer parts of the Province, and it was pointed out by the Superintendent that a number of these Societies would welcome an experienced man who would instruct them in the best manner of conducting their affairs; and, with this explanation, I decided to bring this matter before the attention of this Association.

You are aware each Society is compelled by the law to elect two auditors, and they are required to prepare a statement signed by the officers. I am authorized to say that the Department has no desire to interfere with the

officers or their reports unless circumstances demand it, and if they are not satisfactory to the Society or the Department then the Society, or the Department, or any member of the Society may have the privilege of making application for a special audit.

It may be said that the bringing up of this subject is to question the integrity of these officials, but it is not so intended. The Government desires to have this system perfected, so that all these statements may be accurate. There is a saying that "System is the handmaid of success," and that "Accuracy is the child of honor." If we want both of these we should not object to have our methods looked into. We should welcome any opportunity to improve ourselves. We should not forget that the Government has a right to know that the law, which it has made for the creation and government of these Societies, is being carried out, and that the money appropriated for the assistance of the Societies in an effort to make them pay, is being legally expended, and the members of these Societies have also a right and should be satisfied that their affairs are being properly conducted. I believe that as fair-thinking men we concede this, and that being so, there are two questions which face us. The first is, what is wrong? Are there any Societies that have been making misstatements or misappropriating money? And the next question is what is the remedy? I have already pointed out to you that a number of these statements received by the Department are not just what they ought to be. This, of course, is due to the lack of experience, and from the fact that there seems to be little uniformity in keeping Fair books. Each Secretary and Treasurer has a system of his own, and while it may work out satisfactorily to them, a new man taking charge is very often not able to do it in the same way, and he would appreciate and welcome some one to show him how to keep the books. The printed forms are the same, but, unfortunately, they are not always filled in correctly. That is, as I understand it, the position of the Department, they have no desire to unduly interfere with your work. They simply want to perfect that system to the best of their ability. Speaking as a Director, I can say that we experienced no difficulty with our auditing, and I am authorized by my Board to say that, as far as they are concerned, there is no immediate need for a change in the law. If, however, there are others not so happily situated, I would suggest that the law be amended, giving the Society the right to select two auditors, or the right to select one from the Department, or one from the Department and one from outside. This law should be somewhat elastic. It should not be arbitrary or compulsory, and a proper amount of discretionary power should be given to the Society along these lines. I am not prepared to go so far as to recommend the creation of a new office for this purpose, nor would I suggest that the Government should diminish the power of the Societies in these lines, while we concede the right to investigation. We, as directors, would object to a too great limitation of the power of the men at the head of this Association. They all give their time and money to benefit not a few, but, the whole community in which they dwell, and I submit that with reasonable safeguards thrown around these Associations, the men in charge of them are best qualified to judge as to how the Association should be run. Having, therefore, due regard to the position of the Department and a desire to assist and co-operate with them in an effort to perfect what seems at the present time to be an inefficient business, and receiving the assurance of the Association that there is really a need of a change; I would recommend that the law be changed in the manner that I have stated.

Before concluding, I wish to say that during my conversation with the Superintendent, who has charge of that Department, there was no promise asked, given or implied as to the action or course I should take with regard to this matter. I was left entirely free, and as far as the Department is concerned they knew no more about what I would have to say than you did.

W. E. Stock: I was the first to introduce this subject three years ago, and I am still of the opinion that it is right. Years ago, municipal books were all kept in different ways, but now I can go to the Treasurer and find out how much money has been expended on bridges or roads or any other department. If we have the different items classified on our Treasurer's books in connection with the Fairs, the auditor could go there and turn up at once and state the amount of money that was expended for prizes for horses, or cattle, and everything else. Each item would be in the proper column and it would be much easier. We have a great many men in connection with the fairs who think the Treasurer is perfectly honest, and in 99 cases out of 100 he is, but in the other case he is not. I know instances where they audited the books in five minutes, and I do not think that is any auditing at all. The auditors should go over the funds that are received for entries. All the Treasurers for the county of Wentworth should be asked to bring their books to Hamilton and the Provincial auditor could come there and audit them. I believe there are a great many magistrates in the country who, if you come to them with your affidavit, say, "Where is your paper" and they sign it—that is no oath at all. I have not changed my views, and I think books should be audited in the same way all over the Province.

I agree with the value of the paper that has been read by Mr. Gould, and, while I am not here to say anything against the Secretaries and Treasurers of the Agricultural Societies, because I suppose they are as good as any other people, there is one thing I may say, and that is that we ought to have a careful, systematic audit of the books. The trouble is the auditors are generally elected as an honor. I know, in many cases, it is just a matter of form, where vouchers are not shown up, and I know of a case that would not bear a close audit, at the present time.

A Member: We are a little premature in this matter. It would be wise first to establish a uniform system of book-keeping, before we ask for a Provincial Auditor. If one auditor is to audit all the books of the Societies in Ontario he would require to start on New Year's day and he would not get through in twelve months. Every Secretary or Treasurer has a system of his own. Take our own Society, if the auditor came there and started to audit our books, it would take him at least two days to do the work, and then I doubt if he would know any more about it than the day that he started. I am Secretary, myself, in that Society. I am perfectly safe in saying that the majority of our societies are conducted in the same manner. Why do we not have a uniform system? Why not establish a system of that kind, and then we could have an inspector or auditor of fair books. We have no possible way of keeping track of things at the present time. We should have a cash book and a ledger account, and it would be wise to get a uniform system of books; then I would hold up both hands for the auditor.

A Member: I do not see the necessity for a Provincial Auditor. I am proud to look into the faces of these gentlemen here who represent the Agricultural Societies and I think within the membership of Societies in the Province of Ontario, there are plenty of intelligent people who are able to audit books. Let us have the money in special grants. I am not Se retary

or Treasurer of a Society, but it appears to me that there should be both a treasurer and a secretary. This strengthens the society, and the more men you get in your local community to take an interest in your fair the better it will go. Paper is cheap, and it is easy to enter on one side of a sheet how much you have paid out for prize money, and on the other side how much has been received. You can then add it up and make a balance. A very small boy at school could do that, and for that reason I think it would be a great loss of time, and a loss of money as well, to have this auditor travelling from one end of the Province to the other. If there is any person who has not been doing just what is right, if there is any Secretary-Treasurer who is suspected, he will soon be found out, brought up and punished, because the Board of Directors or the managing committee is composed of as clever men as are in the community where they live. If the people in the extreme north of the Province want a special auditor, let them appoint one among themselves. I would strongly urge that this matter of a Provincial Auditor be discussed this day six months.

Hereford Bull.

A MEMBER: This question of putting an auditor on fair books is similar to putting an auditor on Municipal accounts. Every fair has a different source of revenue, and how could an auditor come at the source? The revenue of our fair at Weston is received in such a way that if I were disposed to be dishonest he could not find it out. How is the auditor to know about the gate receipts? If your Secretaries are honest your auditors will be intelligent enough to do the work.

ADDRESS.

By C. C. James, Deputy Minister of Agriculture.

I was at an Agricultural Society's meeting held a short distance from Toronto, three or four weeks ago, and there was not a single lady present, and one would imagine from that, that the ladies had no interest whatever in the Agricultuarl Society work of this Province. I would like you to take that home and think it over. We have for a great many years been conducting Societies and holding annual conventions, and Farmers' Institute work, and have all sorts of Live Stock Associations, Fruit Growers' Associations, The Bee Keepers', The Dairymen's, The Vegetable Growers', and so on, and for some reason or other we have over-looked the fact that in connection with agricultural work in this Province, the ladies appear to have no interest whatever in the matter, and we have given them no consideration. There is no work in the Province of Ontario or in any other country where Agriculture takes such prominence as it does here. There is nothing in which men and women are so intimately associated as they are in connection with agricultural work. Take any of our town and city industries; the

Hereford Cow.

wives of the men employed may have very little interest and very little knowledge, indeed, of the work in which the men are engaged. It is a matter of very little consequence as to how the manufacturer is carrying on his business, so long as the cash results are satisfactory at home. The relationship between the home and the factory, and the home and the office of the city man is not very close. When you come to Agriculture, you find that the centre of operations is situated not in a remote office, but in the farmer's home, and his family are mutually interested in that great co-operative work. We have over-looked the fact that the women of this country have a very close and intimate relationship, a very keen interest in the work, and, perhaps, in our discussions on this question, we have neglected that part of it.

Now as to the question of auditing accounts. You belong to a Society that has been doing business for twenty-five or thirty years. You have a wide-awake representative Board of Directors, a first-class President, and a Secretary who has been in office fifteen years, and his books are kept in perfect order, and you come here and wonder "What necessity is there for having a public auditor or having any man outside of your own Board take interest in your affairs?" Why, of course, you are all right, but some of you do not know, perhaps, that there are others that are not so well situated, not so happily located as you are, and it is for the benefit of those, I presume, that a suggestion of this kind is made. I did not hear the paper by Mr. Gould, and it may be that the title, Provincial Auditor, does not after all cover or suggest exactly the ground that is intended to be covered. Do not take away with you the idea that any one in the Department of Agriculture is suspicious that the finances of the Agricultural Societies are not properly looked after. That is not the point at all, and I do not think that is the point Mr. Gould would bring out in connection with his paper But there are ways of working better than others. There are methods of keeping books and handling affairs of Societies and of making appropriations and so on, that are better than others, and the question is, "Can we get from these best societies, suggestions and methods, that would be profitable to the others?" It may be that in an Association of this kind you can bring out all these points, but I doubt it very much. As a rule, when you come to a convention of this kind there are other questions that absorb your attention. You may suddenly become seized with the idea that you want a great deal more money, and that is apt to becloud these other questions. It seems to me that when an officer of that kind is appointed, whether you call him Provincial Auditor or not, he should go from society to society and take up the best methods of organization, and the most successful way of carrying on the work, and he could get suggestions and give them to the different societies. Now, you are familiar with a great many societies that are run on the best business principles. There are no suggestions of any defalcations, or any misappropriation of funds, but it seems to me there must be methods of handling judges, making entries and recording prizes, and of preparing for the Annual Exhibitions and so on, that could be applied with profit to a great many of the Societies. That is all I have to say with regard to that. The Agricultural Department, of course, is not anxious to load itself up with any more officers or any more expense in connection with this work; but, if it is thought by the delegates at this convention that there is some way whereby these methods can be improved, I am quite sure the Superintendent of Agricultural Societies will be prepared to make recommendations and carry out your views as far as possible.

One other point. We have had Agricultural Societies in the Province of Ontario for over a century, and they have been carrying on Exhibitions for seventy-five or eighty years. During that period of time great changes have come over agricultural work in this country. We have had other organizations coming in to take part of the work which your societies originally did. Quite noticeable changes have taken place in the last ten or fifteen years. As I look over the Province and get in touch with the various farming communities, there is a great development of what we may call specializing in agriculture. Sections which formerly were given over to general agricultural work, find that their climate and soil and their relationship to the market peculiarly fit these localities for the development of agriculture along some special line, and you will find that a great change has taken place in the agricultural work of this Province, year by year, and here and there all over the Province you will find communities of farmers

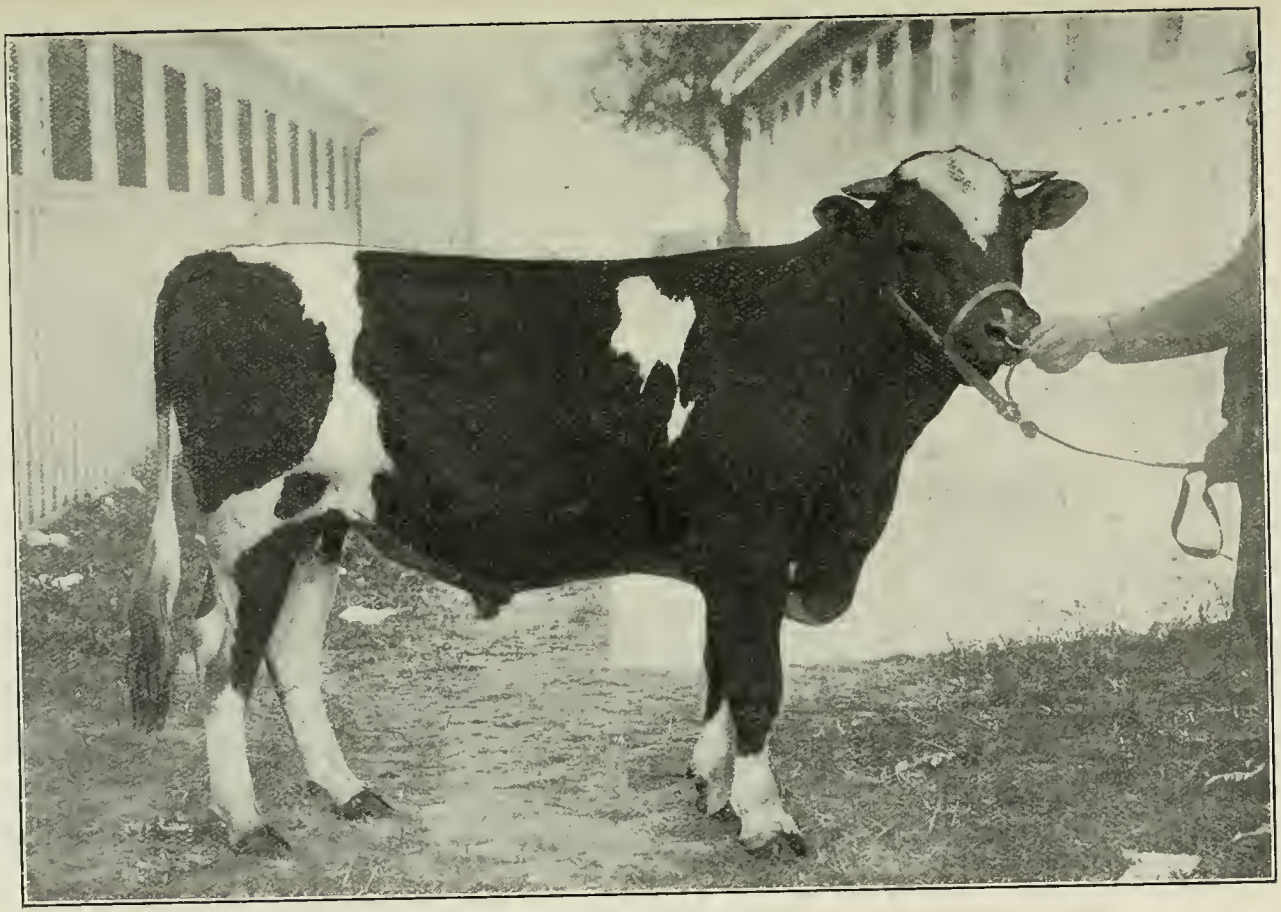
who have become specialists along certain lines, and, as a result, they have become very prosperous. What has that got to do with you? If you will take the prize lists of some of your societies, you will find that this fact has been utterly disregarded, and they differ to-day very little, if any, from the prize lists issued by these same societies ten, twenty, twenty-five, yes, thirty years ago. I am not talking of the widow-awake, progressive societies; I am talking of those who are not so progressive and wide-awake. There are many societies in this Province that have not adapted their prize lists to the great change that is taking place.

Should not our Agricultural Societies take a note of that, and should they not adapt their work to the further development of those particular lines which mean for the well-being of the farmers of that community? There is no reason in the world, so far as I can see, why the prize list of a show adjoining Toronto, should be exactly the same as the prize list of an Agricultural Society up in the counties of Essex or Kent, for instance. The agriculture of the townships adjoining Toronto is almost entirely different from that of other localities that I might mention in the east. Your business, it seems to me, is to assist through your annual Fall Fairs in the development of the agriculture of your locality, and it is an utter waste of money to expend it in the development of those lines for which your particular section is not adapted. We ought to make a careful study of that. If our Agricultural Societies are going to keep in touch with what is taking place in connection with so many other societies, they ought to be very careful to see that they are adapting their prize lists and their Fall Fair to the development of those particular lines that are peculiar to their locality. In a locality where the entire community is given over to the development of fruit growing and vegetables, the question ought to be considered carefully, as to whether the Agricultural Societies should not step in, and by their work and their prize list, develop these particular lines of work, and cut out those which are not adapted to that section, and in which the farmers of that community have very little interest. This system is being adopted in a great many societies.

Agricultural Societies are our oldest organizations, and there must be a strong element of usefulness in them, or they would not have continued so prosperous up to the present. I suppose one indication of their prosperity is that you thought you would ask for further funds to develop that work; but you must remember that we have a great many other organizations, and do not be surprised if, when you go to visit the Government, you are confronted with the statement, that the Agricultural Societies are not the only institutions to be considered, and that you have had very hearty and generous assistance in the past. I am not discouraging you in that regard, and I trust you will get all the money necessary for the carrying out of your work. I thank you very much indeed for the pleasure of meeting with you, and hope that in the working out of the society you will find a hearty co-operation between the officers of the society and those of the Department of Agriculture. If there is any error committed by any of our men you may take it for granted that it is one, not of intention, but simply because there are human beings with the Agricultural Department just as there are human beings running Agricultural Societies.

SCALE OF POINTS FOR HOLSTEIN-FRIESIAN BULL.

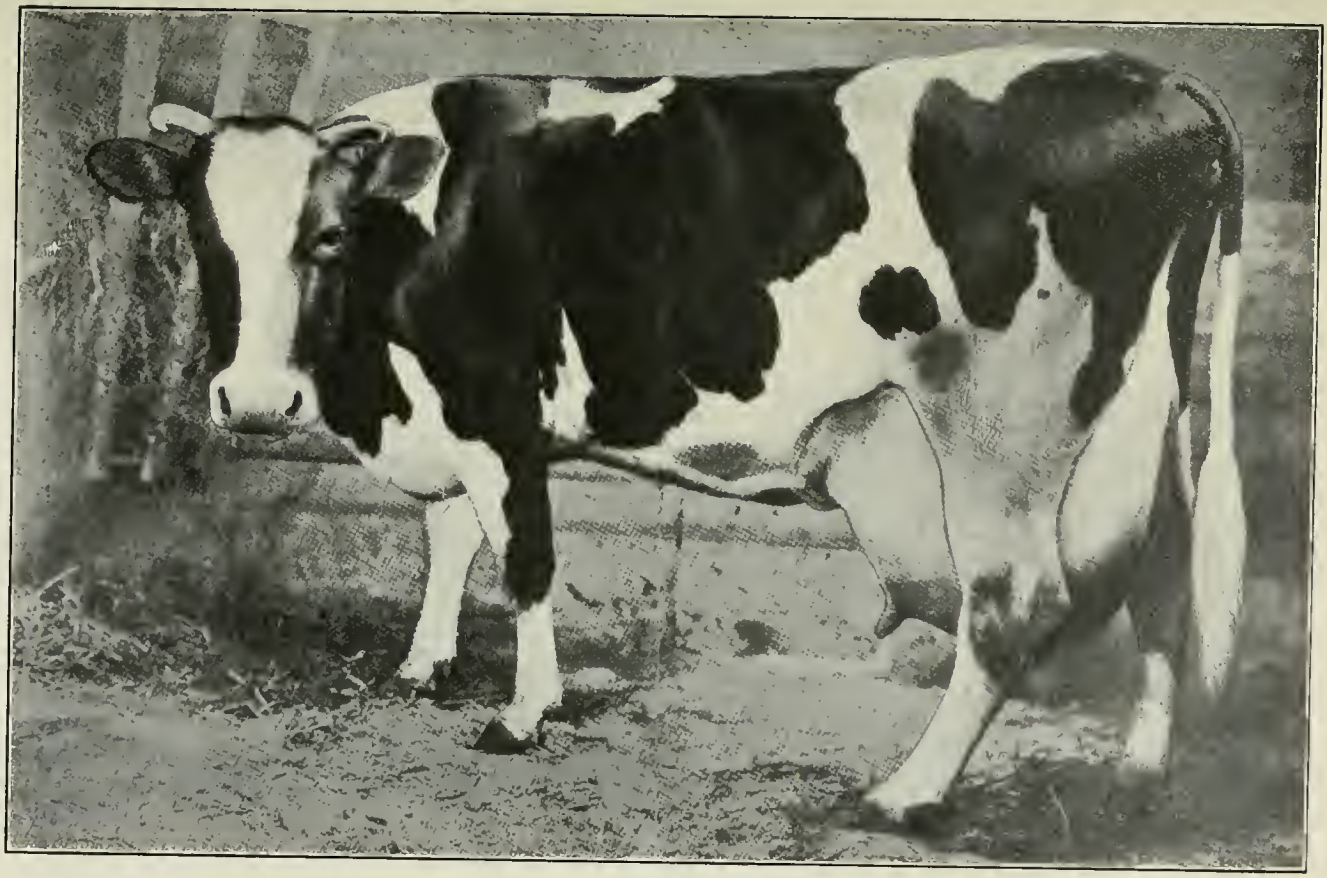
HEADS:—Showing full vigor; elegant in contour	2
FOREHEAD:—Broad between the eyes; dishing	2
FACE: Of medium length; clean and trim, especially under the eyes; the bridge of the nose straight	2
MUZZLE:—Broad with strong lips	1
EARS: Of medium size; of fine texture; the hair plentiful and soft; the secretions oily and abundant	1
EYES:—Large; full; mild; bright	2
HORNS:—Short; of medium size at base; gradually diminishing towards tips; oval; inclining forward; moderately curved inward; of fine texture; in appearance waxy	1
NECK:—Long; finely crested (if the animal is mature); fine and clean at juncture with the head; nearly free from dewlap; strongly and smoothly joined to shoulders	5
SHOULDERS:—Of medium height; of medium thickness, and smoothly rounded at tops; broad and full at sides; smooth over front	4
CHEST: Deep and low; well filled and smooth in the brisket; broad between the forearms; full in the foreflanks [or through at the heart]	7
CROPS:—Comparatively full; nearly level with the shoulders	4
CHINE: Strong, straight, broadly developed, with open vertebrae	6
BARREL: Long; well rounded; with large abdomen; strongly and trimly held up	7
LOIN AND HIPS:—Broad; level or nearly level between hook-bones; level and strong laterally; spreading out from the chine broadly and nearly level; the hook bones fairly prominent	7
RUMP: Long; broad; high; nearly level laterally; comparatively full above the thurl; carried out straight to dropping of tail	7
THURL:—High; broad	4
QUARTERS:—Deep, broad; straight behind; wide and full at sides; open in the twist	5
FLANKS: Deep; full	2
LEGS: Comparatively short; clean and nearly straight; wide apart; firmly and squarely set under the body; arms wide, strong and tapering; feet of medium size, round, solid and deep	5
TAIL:—Large at base, the setting well back; tapering finely to switch; the end of bone reaching to hocks or below; the switch full	2
HAIR AND HANDLING:—Hair healthful in appearance; fine, soft and furry; skin of medium thickness and loose; mellow under the hand; the secretions oily; abundant and of a rich brown or yellow color	10
MAMMARY VEINS:—Large; full; entering large orifices; double extension; with special development, such as forks, branches, connections, etc.	10
RUDIMENTARY TEATS: Large; well placed	2
ESCUTCHEON:—Largest; finest	2
Perfection	100



Holstein Bull.

SCALE OF POINTS FOR HOLSTEIN-FRIESIAN COW.

HEAD:—Decidedly feminine in appearance; fine in contour	2
FOREHEAD:—Broad between the eyes; dishing	2
FACE:—Of medium length; clean and trim especially under the eyes, showing facial veins; the bridge of the nose straight	2
MUZZLE:—Broad with strong lips	1
EARS:—Of medium size; of fine texture; the hair plentiful and soft; the secretions oily and abundant	1
EYES:—Large; full; mild; bright	2
HORNS:—Small; tapering finely towards the tips; set moderately narrow at base; oval; inclining forward; well bent inward; of fine texture; in appearance waxy	1
NECK:—Long; fine and clean at juncture with the head: free from dewlap; evenly and smoothly joined to shoulders	4
SHOULDERS:—Slightly lower than hips; fine and even over tops; moderately broad and full at sides	3
CHEST:—Of moderate depth and lowness; smooth and moderately full in the brisket, full in the foreflanks [or through the heart]...	6
CROPS:—Moderately full	2
CHINE:—Straight; strong; broadly developed, with open vertebrae	6
BARREL:—Long; of wedge shape; well rounded; with a large abdomen, trimly held up, [in judging the last item age must be considered]	7
LOIN AND HIPS:—Broad; level or nearly level between the hook-bones; level and strong laterally; spreading from chine broadly and nearly level; hook bones fairly prominent	6
RUMP:—Long; high; broad with roomy pelvis; nearly level laterally; comparatively full above the thurl; carried out straight to dropping of tail	6
THURL: High; broad	3
QUARTERS:—Deep; straight behind; twist filled with development of udder; wide and moderately full at the sides	4
FLANKS:—Deep; comparatively full	2
LEGS:—Comparatively short; clean and nearly straight; wide apart; firmly and squarely set under the body; feet of medium size, round, solid and deep	4
TAIL:—Large at base, the setting well back; tapering finely to switch; the end of the bone reaching to hocks or below; the switch full.	2
HAIR AND HANDLING:—Hair healful in appearance; fine, soft and furry; the skin of medium thickness and loose; mellow under the hand: the secretions oily, abundant and of a rich brown or yellow color	8
MAMMARY VEINS:—Very large; very crooked (age must be taken into consideration in judging of size and crookedness); entering very large or numerous orifices; double extension; with special developments such as branches, connections, etc.	10
UDDER AND TEATS:—Very capacious; very flexible; quarters even; nearly filling the space in the rear below the twist, extending well forward in front; broad and well held up	12
TEATS:—Well formed; wide apart; plumb and of convenient size	2
ESCUTCHEON:—Largest; finest	2
Perfection	100



Holstein Cow.

DEPUTATION TO THE CABINET MINISTERS.

Adjournment was then made to the Parliament Buildings, in order to lay the views of the Association before the Cabinet as to the securing of an increased grant. The members of the delegation, to the number of 400, assembled in the Railway Committee Room, and were met by the Hon. Nelson Monteith, Minister of Agriculture, and Hon. J. A. Matheson, Provincial Treasurer.

In introducing the speakers Alex. McDonald said, I believe that you will agree with me that the Agricultural interests of this Province are the chief source of our wealth. I presume nine-tenths of the comforts and pleasures and interests of this life come from mother earth, and have been brought into existence by the tiller of the soil, and the Agricultural Societies and Institutions throughout the Province, and, that being the case, we feel that we can use to better advantage a greater sum of money than is now set apart for Agricultural Education. We are handicapped in many ways, because we have not got at our disposal sufficient funds to carry on the work.

Dr. Simmons: We are assembled here this afternoon as representatives of the individual Fairs of the Province of Ontario to tell you that the educational interests that are of so much importance to the rising generation, cannot be met by the amount of money that you grant to the striving and struggling Agricultural Societies. We have the desire in very many parts to introduce educational features along the line of School Children's Displays, of Field Crop Competitions which deserve a special grant, as it had during the past year. When we come to consider that this Province is producing nearly $400,000,000 of produce at the present time, compare that with what it was doing twenty years ago, when the same amount of money as is given to-day was divided among a lesser number of Societies. These Agricultural Societies have increased from 283 to about 360. In your wise judgment, we hope and pray that you will deem it advisable to assist us in this noble work of upbuilding the Agricultural interests of this fair Province of Ontario by granting the matter of an extra $30,000 to be distributed for agricultural purposes according to the Act.

E. Boughner: I am here to voice the sentiments of the Fairs and Exhibitions in asking for an increased grant of $30,000 for agricultural purposes. At the outset, the question may arise as to whether we have been making good use of what we have received in the past. While not in a position to speak from general knowledge of the whole Province, in our own County of Norfolk, where there are seven Agricultural Societies, I know, from my own personal experience that they are doing excellent work. There is not a society in that county which is not progressing to some extent under the present conditions; but the Township Societies—or those that were Township Societies—feel the great necessity for an increased grant. In our societies we have not run into any fads or anything of that kind, but we carry out the provisions of the Agricultural Societies Act, as expressed in Section 9. You may ask what we expect to do with an increased grant? We would like to improve along educational features. There are special lines of work that have been taken up by some societies that could be taken up by others that certainly would be an advantage to the agricultural interests of the Province. In our County Society at the town of Simcoe, we have, for years, without receiving one dollar of remuneration from the Government for so doing, been carrying

on work in the way of Experimental Plots. Some of the experiments have been of such a character that if the people would investigate them closely, as some of them do, it would be of vast importance to Agriculture in that part of the country. If I had time, I would speak specifically on certain lines of that work, but I have not the time to do so.

Hon. Mr. MATHESON: Is that done in connection with the High Schools at all?

E. BOUGHNER: Not yet; but in connection with the Agricultural Societies we have these experimental grounds, and we secure seeds from the College at Guelph, and we have been carrying on that work for the last ten or twelve years. Then, again, there is another line of work that is taken up in some sections and might be taken up with advantage in many other places, and that is the giving of prizes for the growing of field crops. I believe that is a work which could be taken up to very great advantage and probably would be taken up if you, in your wisdom, would see fit to give us an increased grant. There are other points that I would like to talk on, but I know that your time is limited. I would not forget, for a moment, the point I discussed last night that, if you are going to increase from $70,000 to $100,000, (and I hope you will), some parts, at least, should be devoted to the paying something towards the grounds and buildings that have been and are going to be erected in this Province.

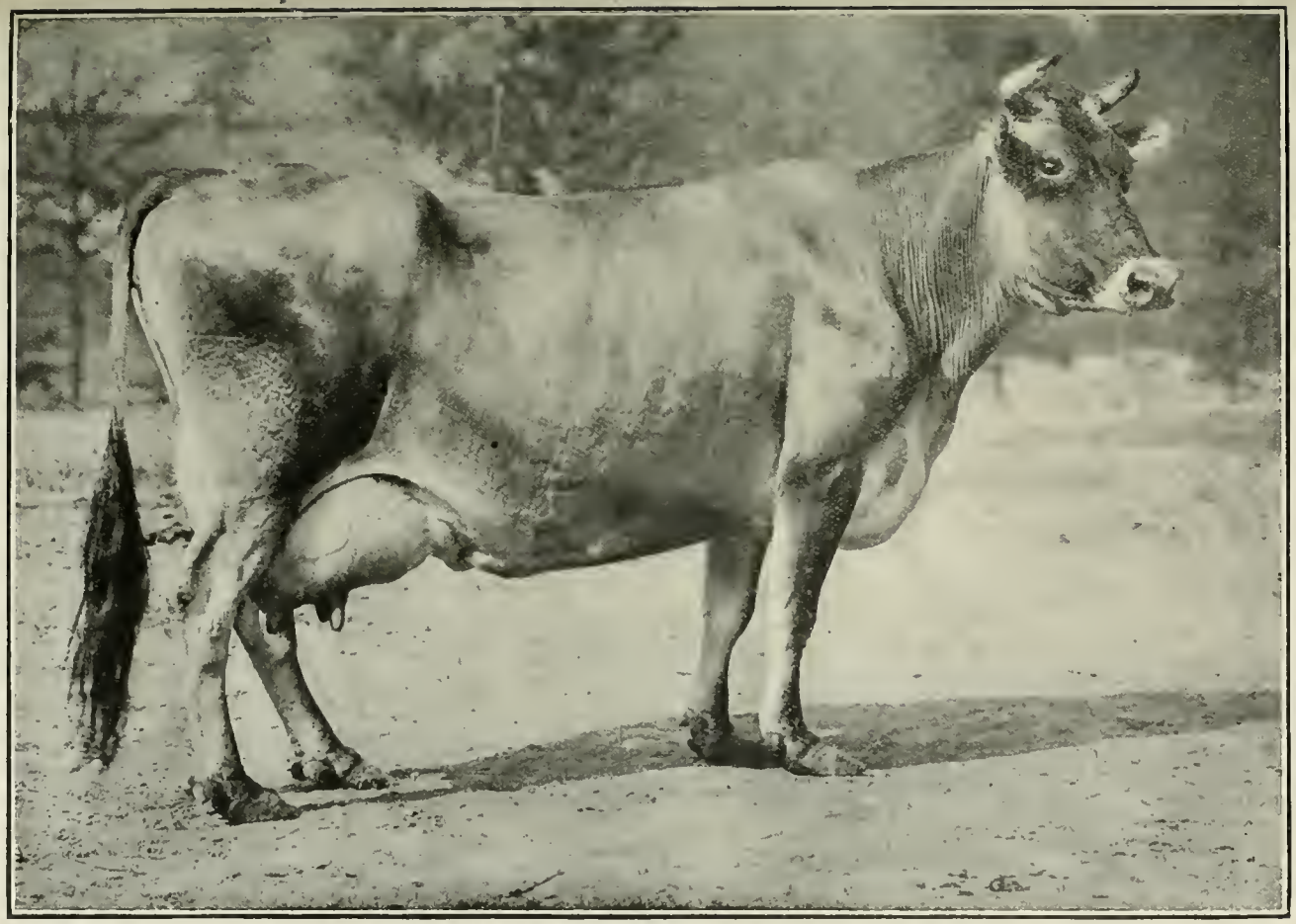
Hon. Mr. MONTEITH: We are glad to have such a representative gathering here, to bring before us such an important subject. You are quite aware that there have been vastly increased expenditures along other lines of educational work in connection with Agriculture. Your work has received a slightly increased grant under the new Act, and you have been divorced from the Horticultural Society work, which is distinctive in itself, and if you take the two Associations and combine the amounts of money they receive from the Government, it is largely in excess of what the original Agricultural and Horticultural Societies received. However, we are appreciative of the fact that you are representing an important industry, one of the oldest and most ancient of organized branches of agriculture; but you must recognize that there are many other branches that have developed and grown up from the parent stem during the last few years, until to-day you will find, in the estimates under the head of Agriculture, that you are receiving about one hundred and eighty thousand dollars in excess of what you did three years ago, showing that, after all, we are not unmindful of this great branch of human industry.

We appreciate what you have presented to us this morning, and we trust to give it our very serious consideration.

Hon. Col. MATHESON: I am very glad to meet you with my colleague Mr. Monteith, and I must say that I am astonished at your modesty. We generally have deputations coming here asking for several hundreds of thousands. I think if we had money to spend that your requests are not unreasonable. You must remember that owing to the growth of the country we have a tremendous increase in our expenditures. Take for instance the asylums, they are becoming very expensive; estimates are coming in now from a single asylum for $10,000 increase for food, a thing we cannot strike off You all know the cost of living, and coal has gone up, and this is an increase that we positively cannot cut down; we must feed the people, and clothe them, and to get all the necessary supplies costs thousands upon thousands of dollars more than it did a few years ago.

Then, we have our north country to open up, and that cannot be done without colonization roads, and large expenditures are being made in that direction. And we have hospitals and charities requiring aid, and we have

Jersey Bull.



Jersey Cow.

your own Department of Agriculture. As Mr. Monteith has said, the increase in the expenditure for agriculture over what it was three years ago is considerably over $180,000. He fights for his Department, and it is my business to keep the general expenditure within the receipts and the revenue.

The responsibility on the Treasurer is general. If we are spending more than our revenue allows us, the Legislature will probably hold the Treasurer in the first place responsible for that increase, if it is excessive; and, for that reason, expenditures that are perfectly justifiable are granted, if we have the money and they are reasonable, but, we are not justified if we have not got it.

I am not altogether satisfied with the expenditure for agriculture—not the amount of it; I am willing to give the amount—but I do not think the best results are always obtained. The principal point I object to is that there is too much spent on all these Associations. You take the Breeders' Associations, and others, and they get a shorthand report of their annual meetings. The only shorthand report that we get of the Legislature is one or two of the speeches, perhaps the Budget Speech, and one or two others. Of course these Association reports are cut down afterwards by the Department Officials, but still this expenditure amounts to two thousand dollars sometimes for printing of the report of an Association which has perhaps four or five hundred members. Could not that money be spent in some other direction? I am not so sure that all of these Associations are required. Of course, they all fight for themselves, but it is worth while considering whether there cannot be some general re-adjustment that would give more for general purposes. You are doing a splendid work; there is no doubt that agriculture is the backbone of this Province.

We have a large amount of manufacturing and mining and a great deal of transportation work, but after all the backbone of the Province is agriculture.

If you take one hundred men who are merchants, one hundred who are mechanics, and one hundred who are farmers, and at the end of five years look at the results of their work you will find that the one hundred farmers come out better than any others. Mechanics come into towns and cities and they do not save anything; they spend as much as they make. A man gets three dollars a day, and if the factory happens to shut down he has to borrow money to get out of town. Only ten per cent. of business men succeed in life, and some say only five per cent. do. The farmers are doing splendid work, and you should show your sons that they do better financially on the farm than anywhere else. Take a young fellow that comes into town here as a clerk, for five or six hundred dollars a year, what has he before him? I was on a street car the other day, and there was no one else on the car but myself, a street railway employee and the conductor, and this employee was complaining to the conductor. He said he was getting ten dollars and a half a week, and out of that he had to pay four dollars for rent, which left him six dollars and a half to support himself, his wife and three children. Now he cannot do it, yet that same man on the farm with that same pay would do well.

I am glad to have met you. I think that your requests are reasonable, and if we can find the money I would be glad to give my consent, as far as I am concerned; but I am only one of the Cabinet, and we cannot tell you whether we can do it this year or not. You have impressed me very favorably as to what should be done.

FIELD CROP COMPETITIONS.

A. McDonald, Shelburne, First Vice-President, occupied the chair at the opening of the afternoon session. He asked the meeting to discuss the question as to how the Field Competition should be conducted.

J. W. Sheppard: What is going to be the method of dividing the grant for Field Crop Competition? Last year, the first ten societies that applied received the grant. That does not appear to be a fair distribution. Some suggestion might be given by those who have had experience as to what should be adopted for the present year.

J. Lockie Wilson: I would like to get as much information as possible as to what you consider would be the best plan on which to run this competition. Our grant this year may be two or three thousand dollars, but I have no idea how much it will be. I would like to have some plan or suggestion from you as to what societies should be allowed to compete in these Standing Field Crop Competitions. Even if we are able to get an increased grant this year (as we hope to do), it will be necessary to limit the number of societies entering, in order that a fair amount of prize money be given to each society. It has been suggested that we divide the Province into two parts, east and west of Toronto, and let ten societies east and ten west, or twenty societies east and twenty west enter, which have paid the largest amount for purely agricultural purposes. That suggestion has been made, and I would like to hear you discuss it. It was late when we got the grant last year, and the work had to be done promptly and so we wrote to the Secretaries and the first ten that applied were accepted.

W. E. Stock: What was the size of the plots?

A.—Five acres and upwards, not less than five and as much larger as you like. I think a better plan this year would be for the societies to decide on and stick to one crop. There was no cost to the societies for judges in 1907 and there will be none this year. We have arranged with the Dominion Seed Commissioner to provide them.

A Member: It is fully understood that the competition takes place under the auspices of an Agricultural Society?

J. Lockie Wilson: Yes.

A Member: Each society knows the grain that is mostly grown in their district, and I think each should confine the competition to one kind. We did that, and our competition was a good one; very few noxious weeds are to be found in the fields entered for prizes and these competitions will teach the farmers how to fight weeds and will help our Seed Fairs.

J. Lockie Wilson: Suppose we get a grant of $2,000. We can arrange that each society should be paid dollar for dollar. Thus, if we give $25 the society should put up $25 more. That is a proposition you might discuss, because the money will not go very far, and the societies should be willing to do their part. There are always a few men in the community who are interested in a thing of this kind, and they might give a small donation.

Q.—How are these plots judged?

A.—By score cards.

A Member: A person could not enter a competition of this kind unless he knew a year before hand. This year we expect to come in, and if you give the grant to the societies who give the most money to Agriculture, you will not get so many to compete.

A Member: The best way is to divide the Province.

Alex. McDonald: Is there a provision made that the products of these Standing Field Crop Competitions, when placed upon the market, will be guaranteed as first-class seed, and that there are no weed seeds in it?

J. Lockie Wilson: There is no provision made as far as that is concerned, but the very fact that the man takes first prize for a field of grain in competition with three hundred and twenty-five other farmers and with three thousand acres in crop, should be a sufficient guarantee, and it shows you that there will not be much trouble about the value of the seed when I tell you that a man who won a first prize sold his oats at two dollars and fifty cents a bushel.

Shorthorn Bull.

AUDITORS' REPORT.

Alex. McFarlane: Your auditors beg leave to report that having examined the accounts of the Treasurer and the vouchers, we find them correct. There was a balance on hand from last year of $51.00 and the balance to carry forward to next year's account is $128.24. There are 122 Societies represented at this convention.

Upon motion of W. Channon, seconded by Alex McDonald, the report was received and adopted.

Moved by W. E. Stock, seconded by Robert Cowan, that "We, the delegates now assembled, wish to tender our thanks to the City or Toronto for the use of this room for the holding of our meetings." Carried.

HOW CAN THE EDUCATIONAL FEATURES OF SOCIETIES BE IMPROVED.

By John Farrell, Forest.

Since I had the pleasure of meeting you before I have not seen a great deal of our own country, but I have had the pleasure of going afar, and while in the Old Land, I always had your interests well in hand, and have tried to do everything I could for the betterment of the people of the Pro-

vince of Ontario. If there was one thing more than another that was interesting to me, it was the privilege I had of visiting the World's Fair at Dublin. When I passed through the gates and met an officer or director, I would say to him "Will you please direct me to the part of the Fair that is most interesting, as I am a stranger in this land and I have only a short time at my disposal," and the reply, in every case was, whether he was an Englishman, a Scothman or an Irishman, "By all means visit the Canadian Exhibits." It was very flattering, indeed, to Canada because it was very

Shorthorn Cow.

beautifully arranged, and the display excelled anything that I have seen either in America or elsewhere. The greatest part of the display came from the Province of Ontario, although the whole Dominion of Canada had the benefit of it. I was pleased that I was a Canadian, and when we were in the hotels or elsewhere we would hear people saying that Canada must be a wonderful country when they could grow such beautiful fruit. Some people would say there is no nation on earth that could produce the articles that are on exhibition down at the Canadian Building, and whenever I was within hearing I would say to them, "Now, gentlemen, if there is anything that you found there to-day on exhibition in the Canadian part of the Exhibition that we cannot show you when you go to our Dominion I will bind myself to pay your way to Canada and back, because there was not a single article there that cannot be found in our own country."

Although I have travelled over our country a great deal and visited it in various capacities, and taken an interest in griculture as well as in other pursuits, I did not know of the greatness of our country until I visited the Dublin Exhibition.

I have been asked to give some idea of the working out of the District Fairs' Association of the Western part of the Province. Owing to the election of officers at the Western Fair at London, I was not able to be here yesterday. To be brief, there is nothing that I know of that has advanced

the interests of the fairs to the same extent as the organization we have in Western Ontario. When we have fair honest competition, every fair in the district has the right to compete. There is nothing wrong in that, because it is only by doing a thing fairly and honestly that we are able to do justice to ourselves; but when jealousy creeps in, (as it does in some districts) and one fair will do something unscrupulous, so as to get the better of its neighbors, that does harm. This kind of thing existed in our neighborhood, to a certain extent, and we thought it well to ask the fairs within a certain radius to send one or two delegates to some central point and start an organization that would do a certain amount of good by having our fairs organized. If you examine the record of the Western District Fairs' Association you will come to the conclusion that it certainly has been a success. In the first place, all rivalry has been abolished, and, on the other hand, harmony is the rule throughout the district. If we have a fair in one part of the County, the whole united efforts of that district helps to make that fair a success. They are still interested in their own fair, but they lend a helping hand to every other one in the district; and it has had the effect of bettering our fairs not only financially but socially and in every way possible. We find it a means whereby we can advertise very cheaply. We get out one large poster, and on that we put the dates of the various fairs and the special attractions that they desire to advertise; and instead of each fair having to get out a separate lot of posters and go to the expense of putting them up, one lot is secured and they are mailed to each Secretary. It is his duty to see that these bills are posted and kept up there from the time the advertisements are sent out until the fairs are over. You can readily understand what a means of advertising it is. You advertise not only your own fair, but all the neighboring ones. In the past we have charged $1 for the Membership ticket. That generally included four admissions. It allows the exhibitor to enter his goods, and gives him the right to one, two or three extra admissions to the fair. We said we will only give two tickets for that dollar; and the exhibitor was not able to go elsewhere and find any fair that would do anything else. Last year we gave a member's ticket and two others and, if it works out well this year, we will simply say to the exhibitor, "We will give the Member's ticket and one additional" We have found it very beneficial.

As far as dates are concerned, we do not have any conflict, because their is no fair in the neighborhood that fixes its own dates. That we do at the Annual Meeting of the District Fairs' Association, which arranges a system of dates which is sent to the various Secretaries, and in every case these have been accepted. The officers of this Association have the right to fix the dates of every fair in the district, and we have no clashing of dates or any difficulty of that kind. The Superintendent will tell you that he sends up judges to our fairs and they go right around the circuit, and, when they are through, there is no lost time, and our expenses are much less than they otherwise would be, and the judges know exactly whom to apply to for information. It has placed our fairs on a much higher plane than they ever were before.

I wish to say a word to you this afternoon about the educational features at Fall Fairs in the Western part of this Province. We have come to the conclusion that we should start with the children early in life. We should take hold of the youth of this country and educate them along agricultural lines so that they will grow up imbued with that spirit that would make it a second nature with them to want to be identified with agriculture. We went to the school and said to the teachers, "We are going to give a first-class

cabinet-organ, as a prize for the finest drill and the best patriotic chorus rendered by any school in the district." It is needless to tell you that we had a strong competition. The grand stand was filled, people were standing on their tip-toes, all crowding around to see the drill and to hear the patriotic chorus. Everybody in the neighborhood was interested because their sons and daughters were there, and they wanted them to excel. This drill was a very clever one and the patriotic chorus was something that would cheer the hearts of any Canadian, and if there is any person more than another that has a right to be proud of their country, it is the Canadian.

The next step we took was to introduce another interesting feature that would be profitable, not only to the pupils, but to the neighborhood as well. We went to the schools and said, "We are going to get a tent and place in it on exhibition every variety of apple that we can possibly find. We shall have the tent on the ground at ten in the morning, and we will allow every boy that wishes to go into that contest to enter free." The boys go in, and the one that can name the variety of every apple in that contest gets five dollars. We found that competition very good. The boys go out after school and ask the farmers the names of different apples. Every variety of apple that is placed on exhibition has a number; and a book is handed to each competitor with the number of these apples, all he has got to do is to write the variety of the apple opposite the number. We also have similar competitions in vegetables and we find these have had excellent results, and are the best advertising scheme we can possibly have.

A great many girls are backward in domestic science, and if there is any one thing necessary, it is to get them interested, so that they are able to keep house, and to keep it well, because that is one of the first things necessary to make a happy home. We offered prizes to girls, fourteen and under, who could make the best loaf of bread; and each one's mother had to declare that her daughter was the only one that did the mixing, baking, etc.

We also gave prizes for sewing and other things. I am not going into detail, but just giving you an idea of how we advanced along certain lines, and how we encourage the children in this particular line of education, so that you will understand that by giving prizes and allowing the children to compete for them, we are having very excellent results. Boys from the cities when they come out to visit boys on the farm, will often say, "How much have you in your bank?" and the country boy will answer, "I haven't got anything at all." Now the city boy has, and how is that? The city boy can help in different ways, and make a little money in the city, and the boy on the farm has not a cent. But in these communities where we are carrying on these competitions, the boys are all going to have bank accounts. When we award a prize, we make out a check and give it to the child, and he takes it to the bank and gets his money and puts it in his pocket. I think the boy on the farm has as good a right to a bank account as the boy in the city.

A MEMBER: We have a lot of experienced judges among our boys. We have had this contest among the children, and now we have boys who can select seeds, and they are taking a great interest in this contest. We have a school children's procession on fair day, and last year I issued two hundred and fifty school children's tickets.

ALEX. MCDONALD: At our annual meeting we put on a juvenile set of Directors, and we propose to put a badge on them and on the day of the show, give them certain work to do. We are going to educate them so that they will be capable, when the times comes, to be Directors of our Society.

A letter was read by the chairman from the secretary of the Holstein-Friesian Association of Canada asking that the dairy breeds be placed on an

equal footing with beef breeds in the prizes offered at the various Fall Fairs in Ontario, and that a separate class be provided for grade females, also that qualified dairy judges judge the dairy cattle.

The CHAIRMAN: This has reference to all dairy breeds, and the idea is no doubt a good one, because dairying is one of the most important industries in Ontario.

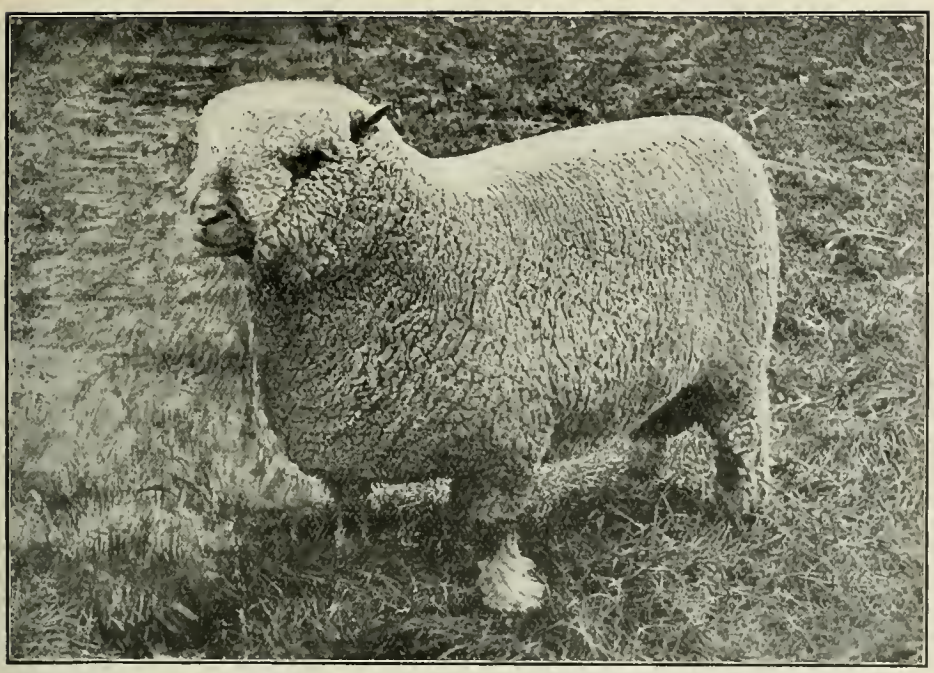
A MEMBER: If the Society pays the expenses of delegates to this convention, should they be considered as money spent for agricultural purposes?

A. W. COHOE: I do not think that could come in under the Act. If you allow expenses of that kind you might as well allow for printing and buildings.

J. LOCKIE WILSON: If I had the passing of it I would judge that it was expended for agricultural purposes, and you should be allowed to put it in your returns as such. The Act will have to be looked into carefully; but as far as I am concerned, I would be inclined to have it counted in. I do not think the money could be spent to better advantage for agricultural purposes than to send delegates here to discuss the issues that are brought up before you.

SCALE OF POINTS FOR SHROPSHIRE SHEEP.

GENERAL APPEARANCE:—Attractive, indicating breeding and quality, with stylish carriage and a symmetrical form covered with a dense fleece	25
CONSTITUTION:—Robust, as indicated by width and depth of chest, strength and formation of neck, and by bold active movement	10
SIZE:—In breeding condition when fully matured, Rams should weigh not less than 180 to 225 pounds, and Ewes not less than 125 to 170 pounds	10
FLEECE AND SKIN:—Fleece of good length, dense, elastic to touch, medium fine, free from black fibre, slightly crimped, with evenness of texture throughout; scrotum of Rams well covered with wool. Skin light cherry color, free from dark spots.	15
BODY:—Well proportioned, with shoulders well placed, fitting smoothly upon the chest, which should be deep and wide, broad and straight back, thick loins well covered with firm flesh; hind quarters well finished; twist deep and full	20
HEAD AND NECK:—Head short, broad between the ears and eyes, bold and masculine in Rams, without horns, well covered with wool, ears short and erect, eyes bright, color of face and ears dark brown. Neck of medium length, strong and muscular (especially in Rams,) symmetrically joined to head and shoulders...	15
LEGS:—Well set apart, broad, short, straight, color dark brown, and well wooled; pasterns strong and upright	5
Total	100



Shropshire Ram.

Shropshire Ewe.

SCALE OF POINTS FOR OXFORD DOWN SHEEP.

Breed Type of Animals:—Form of a good general appearance, made by a well balanced conformation, free from coarseness in any part, and showing good style both at rest and in motion	15
Head of moderate length and width between the ears and between the eyes, and well covered with wool over poll and down to the eyes. Color of face an even dark gray or brown, either with or without gray spot on tip of nose	6
When fully matured and in good condition Rams should weigh 250 to 350 lbs., Ewes, 180 to 275 lbs.	5
Ears medium size, not too thick and of an even brown or dark gray color	2
Legs short, strong in bone, flat and of even dark gray or brown color, placed squarely under the body and well apart	2
Constitution:—Large around the heart and wide and full in the chest.	10
The movement must be bold and vigorous	5
Eyes bold, prominent and bright	4
Skin bright pink in color	3
Neck strong and muscular in rams and well set on in both sexes.	3
Mutton Form and Quality:—Wide and straight on top of shoulders, back, loin and rump, from base of neck to tail	15
Full shoulders and thighs, well meated both inside and outside.	5
Flanks well filled and strong so as to make the lower lines of the body as straight as possible, and side lines straight or rather full	4
The whole carcass evenly covered with good, well marbled meat	6
Wool:—Fleece of moderate length, close and of even quality, covering the whole carcass, well and free from black patches upon the body, neck or head	15
Total	100

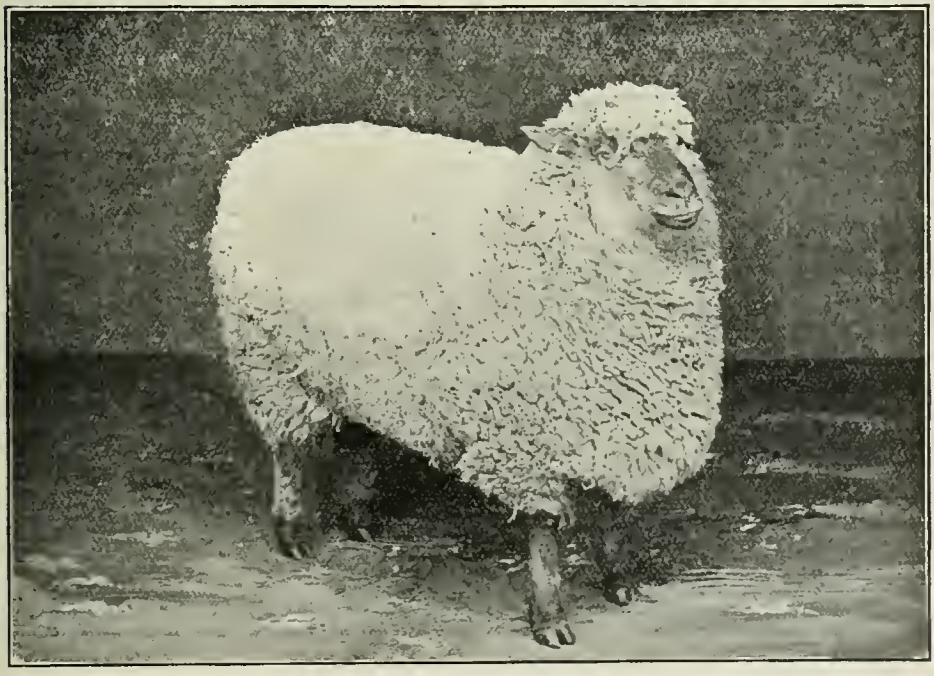
SHOULD SOCIETIES RECEIVING GOVERNMENT GRANTS BE OBLIGED TO EMPLOY JUDGES SELECTED BY THE DEPARTMENT OF AGRICULTURE?

By Dr. Simmons, Frankford.

I had hoped that there had been so much threshing out of the question of special judges sent out from the Department, that it would be unnecessary to take up any further time on the subject. Having been associated for a number of years with Agricultural Societies and knowing, as I do, that the first day of our fair for years under the old regime was a constant turmoil, hunting up competent men to do the judging, I felt when the change was brought into existence and the Department of Agriculture took steps to provide competent men, that the day would come when there would be a regeneration in Agricultural Societies.

I am interested in agriculture, because I have a 350 acre farm and employ three or four men to run it.

Oxford Ram Lamb



Oxford Down Ewe.

The cradle has been replaced by the harvester and the binder in the harvest field, and the harvester will speedily be replaced by the electric motor which is being utilized in the far west, and our rivers will be harnessed by electricity that will be used in doing work on the farm. So the day of the old judge system is past and the day of the special judge is here, but we must arrange some cheaper device for supplying them to the Agricultural Societies than the present costly machinery, because the Superintendent told us yesterday that for 619 days of judging the Government had paid $13,000, although the cost to the societies employing them was only $4,500. How are we to overcome this expense and get the work done at a minimum cost? That is the question that will have to be met in the near future. Very much more important questions have been solved, and I feel that it is within our domain, as a Fairs and Exhibitions' Association, to recommend to the present Government, or their successors in office, whoever they may be, in the near future, means by which we may overcome these, and have special expert judges in every Department. The local judge is often picked by a director who is an exhibitor.

When we come to horses, we have five classes, Heavy Draughts, General Purpose, Carriage horses, Thoroughbreds and Standard Bred Roadsters.

The man who can judge the Thoroughbred Class may not be competent to judge the lighter horses. Consequently it would be necessary, in order to do justice to every class, that we have a competent judge in each and then to go on through the cattle; the men who can judge the beef classes are not competent to judge Jerseys, Ayrshires and Holsteins. It requires a man thoroughly posted in each class to properly judge them. It seems quite a burden on the society to employ four or five different judges, and pay them from $6 to $8 a day. I have seen short wooled and long wooled sheep divided up into four different classes; and I have seen Lincoln sheep shown in competition with the short wooled class and short wooled sheep shown in the wrong class. This was done by a local judge, but if we had a competent judge in each class that would not be done. The same thing has occurred in swine. Some man has had a pedigree for some hog that he has owned, and he uses it for another one; and I have known a half-bred Chester White and Yorkshire pig take a prize, and I do not think a specially qualified judge would allow that kind of thing to occur. I knew there was something wrong with the hog, and I told the judge I was sorry he did not withhold his judgment until we had looked into it. If we are going to do the right thing we must have special judges at our fairs. Last year at our Spring Fair we had T. G. Raynor, and he organized a Pure Seed Association, and I believe it will be a great help in securing the best seed in that vicinity. He had samples of grain he had taken from the Fall Fair the year before, and he showed that there were five different kinds of oats in one bag. Now, unless he had been an expert judge he would not have been able to get at that. Last year we had judging in six different classes—we had a class for men under 25, and one for those over 25 years and we would recommend that we have an examination, and that those that pass the examination should be entitled to carry a certificate as a special judge, and they should be allowed to go to these Short Courses at Guelph, and get a Professional Certificate, and then we would have within our reach, in every Agricultural Society five or six competent judges. That is the way I propose to get over this difficulty.

The Convention then adjourned.

NOTES ON FAIRS AND EXHIBITIONS HELD IN 1907.

The reports from the various Societies show that this was the best year in the history of fairs in this Province.

A million and a half of people passed through the gates of Fall Fairs held in Ontario, in 1907.

The value of grounds and buildings in the Province is over half a million of dollars.

Two hundred Societies employed Departmental judges for Fall Fairs, the largest number ever supplied.

In 1906 there were nineteen Spring Fairs held, in 1907 sixty-one, an increase of forty-two.

The total expenditure of all the Societies for agricultural purposes was $250,261; the expenditure for all purposes was $700,107.

Standing Field Crop Competitions were inaugurated in 1907. Three thousand acres were entered, and three hundred and twenty-five farmers competed. The Government grant for this work was $1,000. This was distributed among the members of ten societies. When the fact is taken into consideration that the area of Field Crops of Ontario is not far short of 10,000,000 acres, one begins to realize how even a slight increase in the production per acre obtained through greater care in the selection of seed and better cultivation, would add to the wealth of the Province as well as to that of the individual farmer. The Standing Field Crop Competitions, although only inaugurated one year ago, have already produced excellent results. Some of the first prize oats sold at $2.50 per bushel, and the other prize winners received from 25 to 50 per cent. above the prevailing market price, and that without leaving their homes, showing the great demand for good grain free from weed seeds.

At the Annual Ontario Fairs' Convention the system of Departmental judges was unanimously endorsed.

A large number of delegates were in favor of classification of horses in prize lists of the societies, and the following standard weights were suggested: General purpose, 1,150 to 1,300 lbs.; Agricultural from 1,300 to 1,600; Heavy Draught, 1,600 lbs. and over.

Under the new Act the annual meetings of Agricultural Societies must be held during the third week in February. The third week has been defined as commencing on the morning of the fifteenth and ending on the evening of the twenty-first.

The system of Secretaries' books supplied by the Department to the societies met with the approval of the convention.

Societies that are the most successful are those that have made their fairs most interesting to the ladies and children.

The address of the Deputy Minister of Agriculture contained an excellent suggestion which societies would do well to profit by, viz.: that prize lists should be carefully revised each year, and the largest premiums offered should be for stock and produce best suited to the locality. This would do away with the anomaly which now so often exists where prize money is offered for breeds and produce which are of little benefit to that section of the country.

THE FIELD CROP COMPETITION.

Report for Bobcaygeon District: T. G. Raynor, Ottawa.

On August 7th, I met Mr. Hickson, the secretary of the Verulam Agricultural Society, and we arranged to visit the competitors together, according to a plan the society had worked out and advertised. We accomplished the work in two days and I found it very interesting.

A score card was used in sizing up each field, and those securing the highest marks were awarded the prizes.

This district should be congratulated upon the quality of their oat crop this year. Seven of the fields would give a yield averaging from 50 to 60 bushels per acre of plump good seed, which would be comparatively free from weed seeds of any kind. Nearly all the rest of the fields, while not so promising as the seven, were good.

The system followed in judging was to walk out into the field of oats and take a circuit around the piece, noting all the points to be marked on the score card. Then I marked the card and got such information about the crop as would enable me to decide, in a close competition, which lot should really stand first.

Some of the conclusions I was able to draw from what I heard were:—

1st. That the competition idea was greatly appreciated. Few of the competitors had any time to make special arrangements for it. In fact quite a few had already sown their oats when canvassed to enter the lists. The results are all the more creditable for the district which marks it as one, where good oats may be produced.

2nd. Not much attention is paid to any system in the rotation of crops.

3rd. There was very little smut this year anywhere, but no attempt was made to stamp it out by treating the seed with germ-destroying solutions.

4th. More or less frequent change of seed to keep up vitality and yield of grain is believed in. Very little is practised by way of selection except by fanning mill.

5th. One and one-half bushels per acre is the average amount of seed used.

6th. Catch-fly was the most cosmopolitan weed in the locality, but there were a number of others more or less objectionable; among them the Perennial Sow Thistle is creeping in, a few wild oats, Canadian Thistle, Twitch or Quack Grass, wild buckwheat, etc.

7th. The source of seed supply not far back in any case had come either from the Experimental Farms or from some of the large seed firms.

8th. Too many varieties were in use.

The public meeting at the close of the judging in the evening was a decided success. It is then that the judge is able, if at any time, to render valuable assistance to those who are interested in the questions of Seed Improvement and weed eradication.

SEED FAIRS AT WHICH T. G. RAYNOR JUDGED.

During the winter and spring of 1908, I acted as judge at seven of the Seed Fairs in Ontario, held under the joint auspices of the Agricultural Societies' Branch of the Ontario Department of Agriculture and the Seed Branch of the Dominion Department of Agriculture, as follows: February 11th, Richmond Hill; February 14th, Listowel; February 18th, Markham; February 26th, Meaford; February 29th, Bobcaygeon; March 19th, Fergus; March 24th, Elora.

The almost impassable condition of the roads interfered with the number of exhibits at the Richmond Hill Fair. There were some fifteen entries and an attendance of seventy-five. Addresses were given by J. Lockie Wilson and myself, in which considerable interest was taken.

Leicester Ram.

At Listowel the roads were still very bad: some sixteen exhibits were shown. An audience of one hundred farmers were out and listened attentively to an address on "Seed Selection."

The Markham meeting proved the best in my circuit. The twenty-four exhibits represented six thousand bushels of seed grain, of which over two thousand changed hands at the meeting. One hundred and twenty-five farmers were out, and discussed the various problems of improvement of seeds.

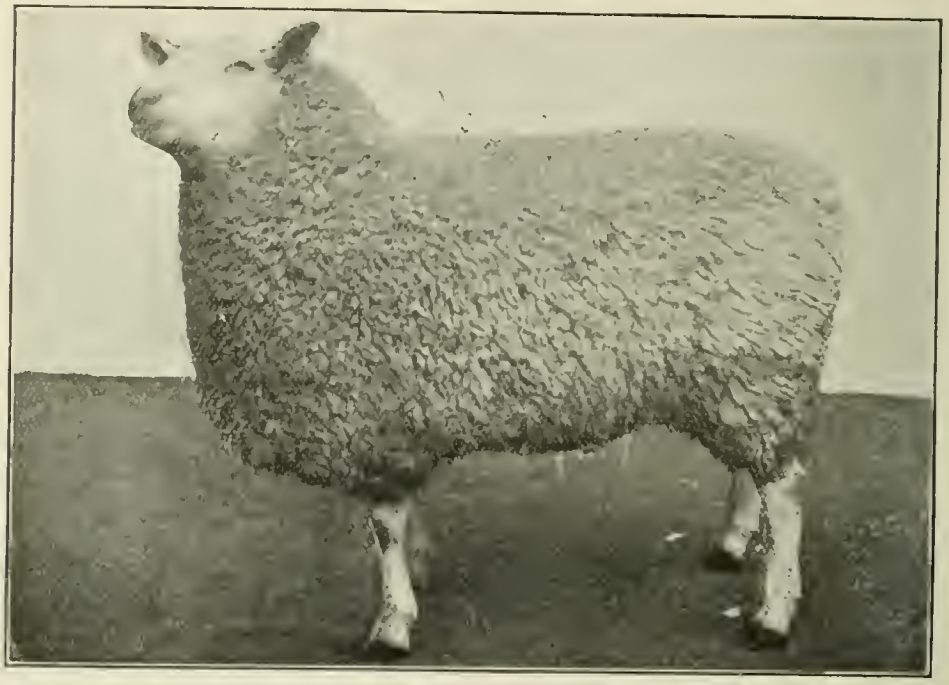
At Meaford, neither the exhibits nor the attendance was large. The exhibits numbered seventeen, and about thirty farmers attended. They promise better things another year.

The Bobcaygeon Fair, for a first effort, was an unqualified success. There were about forty-five entries, fifteen being in white oats alone. This was one of the results of the competitions in Standing Field Crops held during the summer. Over one hundred farmers were out and good was accomplished. Mr. F. H. Reed, Specialist in Agriculture, rendered valuable assistance.

The Fergus Seed Fair sustained its reputation with twenty exhibits and an attendance of about two hundred farmers, who were very much interested in the discussions.

The Elora Seed Fair, although held so close to Fergus, was a very creditable one, there being thirty-one exhibits and an attendance of seventy-five farmers. There would have been a larger number out had the weather and roads been better.

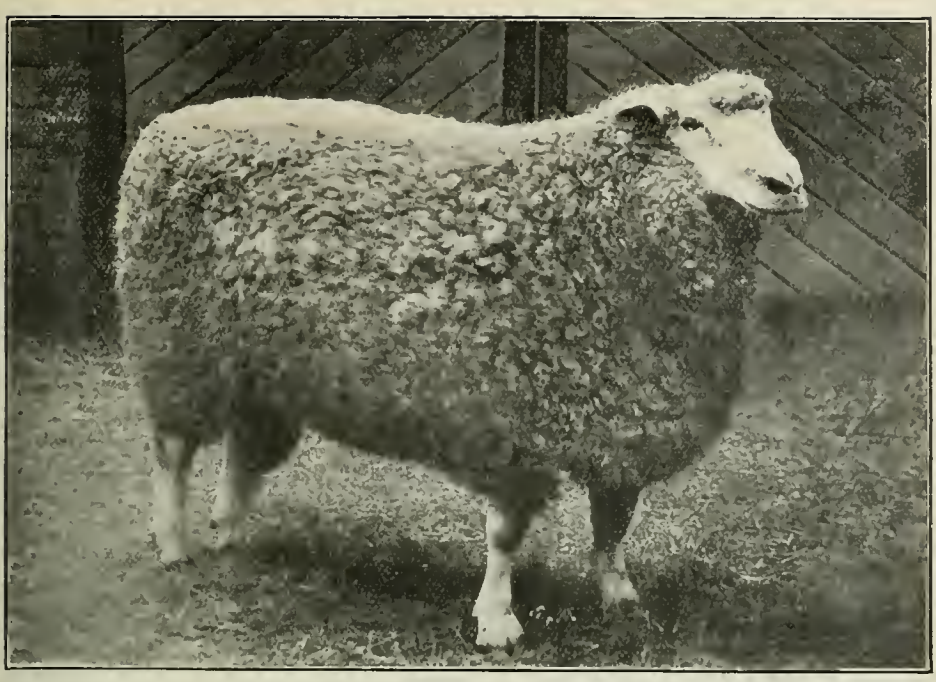
The Seed Fairs have done good work again in the farming communities where they have been held, and next year they will be productive of even better results. Seed judging classes will add very much to their value in the future.



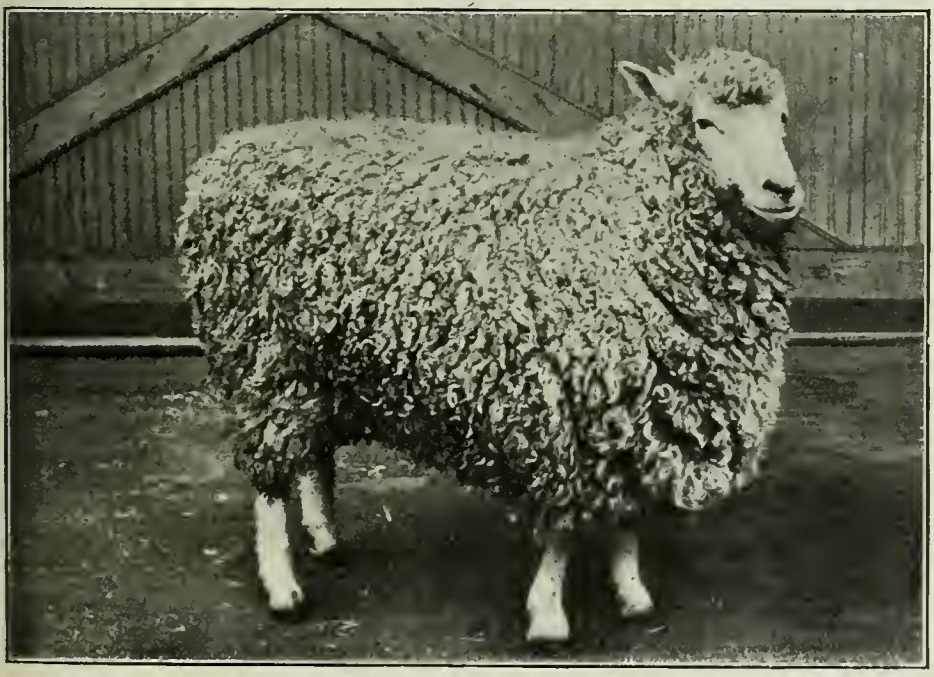
Leicester Ewe.

SCALE OF POINTS FOR LINCOLN SHEEP.

CONSTITUTION:—Body deep, back wide and straight; wide and full in the thigh; bright, large eyes; skin soft and of a pink color.	25
SIZE:—Matured rams not less than 250 pounds, when in good condition. Matured ewes not less than 200 pounds	10
APPEARANCE:—Good carriage and symmetry of form	10
BODY:—Well proportioned, good bone and length; broad hind quarters; legs standing well apart; breast wide and deep	15
HEAD:—Should be covered with wool to the ears; tuft on forehead; eyes expressive; ears fair length; dotted or mottled in color	10
NECK:—Medium length; good muscle; well set on body	5
LEGS:—Broad and set well apart; good shape; color white, but some black spots do not disqualify; wooled to the knees	10
FLEECE:—Of even length and quality over body; not less than eight inches long for one year's growth	10
QUALITY OF WOOL:—Rather fine, long wool; strong, lustrous fiber; no tendency to cot	5
Total	100



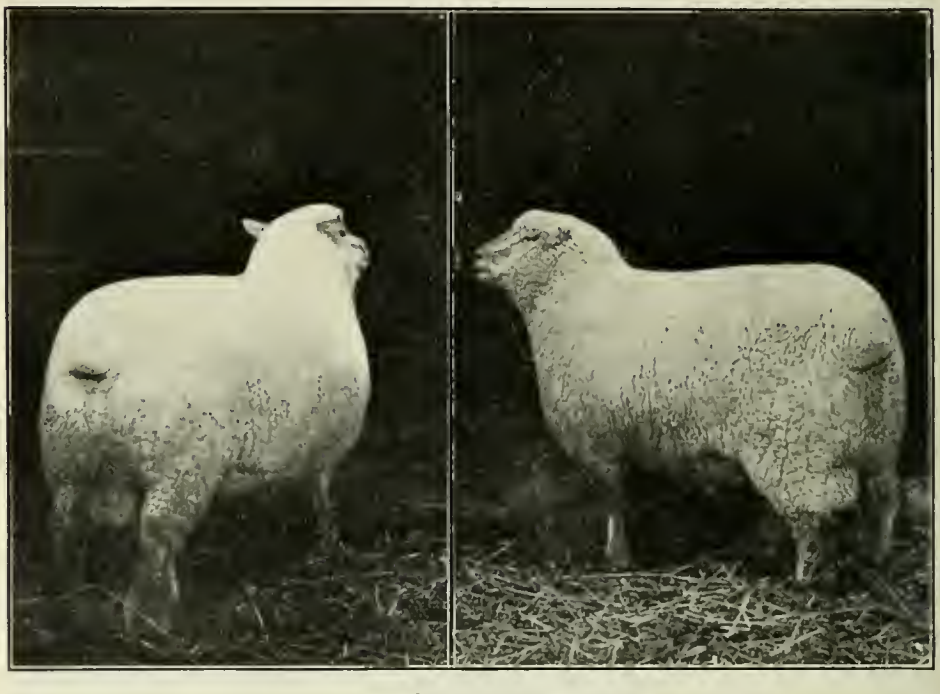
Lincoln Ram.



Lincoln Ewe.

SCALE OF POINTS FOR SOUTHDOWN SHEEP.

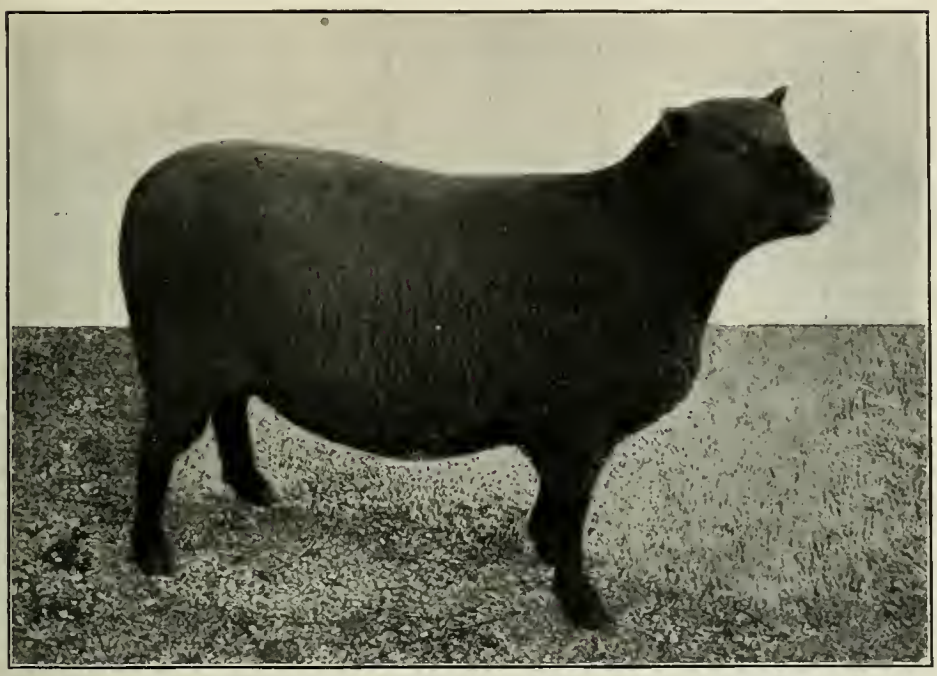
HEAD:—Medium in size and hornless, fine, carried well up, the forehead or face well covered with wool, especially between the ears and on the cheeks, and in the ewe slightly dished 5
LIPS:—And under jaw fine and thin 1
EARS:—Rather small, tolerably wide apart, covered with fine hair, and carried with a lively back and forth movement 2
EYES:—Full and bright 3
FACE:—A uniform tint of brown, or gray, or mouse color 3
NECK:—Short, fine at the head, but nicely tapering, and broad and straight on top at the shoulders 4
SHOULDERS:—Broad and full, smoothly joining the neck with the back 5
BREAST:—Wide, deep, and projecting well forward, the forelegs standing wide apart 5



South Down Rams.

BACK:—And loin broad and straight from shoulders to rump 7
RIBS:—Well arched, extending far backward the last projecting more than the others 6
RUMP:—Broad, square and full, with tail well set up 6
HIPS:—Wide, with little space between them and last ribs 6
THIGHS:—Full and well let down in twist, the legs standing well apart. 6
LIMBS:—Short and fine in bone, and in color to agree with the face... 3
FORELEGS:—Well wooled and carrying mutton to the knees, but free from meat below 2
HIND LEGS:—Well filled with mutton and wooled to the hocks, neat and clean below 2

BELLY:—Straight and well covered with wool, the flank extending so as to form a line parallel with the back or top line 5
FLEECE:—Compact, the whole body well covered with moderately long and close wool, white in color, carrying some yolk 12
FORM:—Throughout smooth and symmetrical, with no coarseness in any part 9



South Down Ewe.

GENERAL APPEARANCE:—Spirited and attractive, with a determined look, a proud and firm step, indicating constitutional vigor and thorough breeding 8

100

SCALE OF POINTS FOR COTSWOLD SHEEP.

Rams.

Head:—Not too fine, moderately small, and broad between the eyes and nostrils, but without a short, thick appearance, and in young animals well covered on crown with long lustrous wool. 8

Face:—Either white or slightly mixed with gray, or white dappled with brown 4

Nostrils:—Wide and expended, nose dark 1

Eyes:—Prominent but mild looking 2

Ears:—Broad, long, moderately thin, and covered with short hair..... 4

Cotswold Ram.

Collar:—Full from breast and shoulders, tapering gradually all the way to where the neck and head join. The neck should be short, thick and strong indicating constitutional vigor, and free from coarse and loose skin 6

Shoulders:—Broad and full, and at the same time joined so gradually to the collar forward, and chine backward as not to leave the least hollow in either place 8

Fore Legs:—The mutton on the arm or fore thigh should come quite to the knee. Leg upright with heavy bone, being clear from superfluous skin, with wool to fetlock, and may be mixed with gray 4

Breast:—Broad and well forward, keeping the legs wide apart. Girth or chest full and deep 10

Fore Flank:—Quite full, not showing hollow behind the shoulder... 5

Back and Loin: Broad, flat and straight, from which the ribs must spring with a fine circular arch 12

Belly:—Straight on underline	3
Quarters:—Long and full, with mutton quite down to the hock	8
Hock:—Should stand neither in or out	2
Twist:—Or junction inside thighs, deep, wide and full, which with a broad breast will keep the legs open and upright	5
Fleece:—The whole body should be covered with long lustrous wool	18
Total	100

Cotswold Ewes.

Ewes.

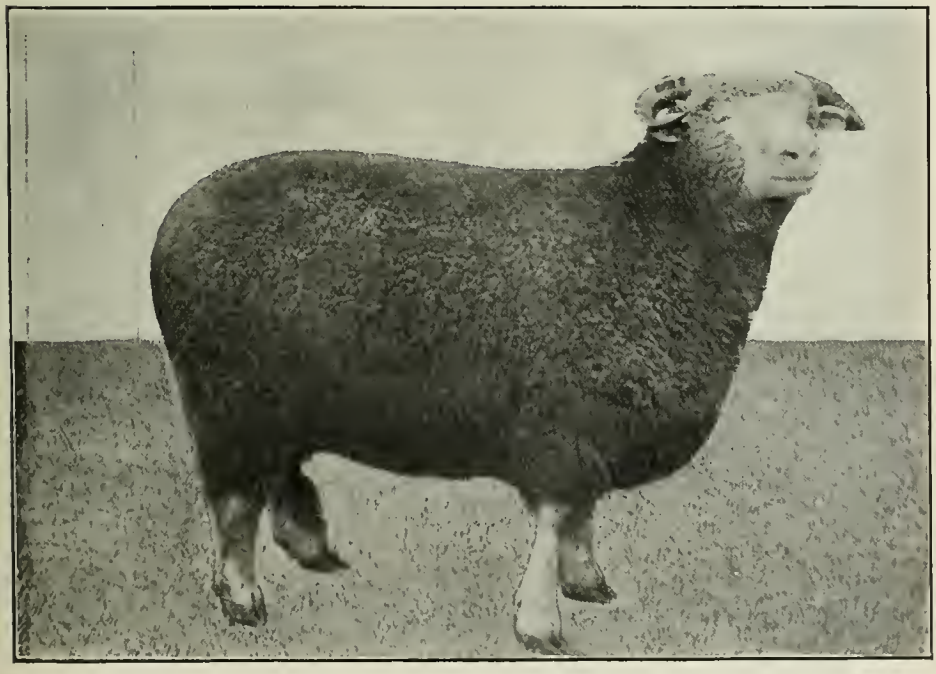
Head:—Moderately fine, broad between the eyes and nostrils, but without a short, thick appearance, and well covered on crown with long lustrous wool	8
Face:—Either white or slightly mixed with grey, or white dappled with brown	4
Nostrils:—Wide and expanded. Nose dark	1
Eyes:—Prominent, but mild looking	2
Ears:—Broad, long, moderately thin and covered with short hair	4
Collar:—Full from breast and shoulders, tapering gradually all the way to where the head and neck join—neck should be fine and graceful, and free from coarse, loose skin	5

SHOULDERS:—Broad and full, and at the same time joined so gradually to the collar forward and chine backwards, as not to leave the least hollow in either place	8
FORELEGS:—The mutton on the arm, or fore thigh, should come quite to the knee. Leg upright with heavy bone, being clear from superfluous skin, with wool to fetlock and may be mixed with gray	4
BREAST:—Broad and well forward, keeping the legs well apart. Girth and chest full deep	10
FORE FLANK:—Quite full, not showing hollow behind the shoulder	4
BACK AND LOIN:—Broad, flat and straight, from which the ribs must spring, with a fine circular arch	12
BELLY:—Straight on underline	5
QUARTERS:—Long and full, with mutton quite down to the hock	8
HOCK:—Should stand neither in nor out	2
TWIST:—Or junction inside of thighs deep, wide and full, which with a broad breast, will keep the legs open and upright	5
FLEECE:—The whole body should be covered with long lustrous wool	18
Total	100

SCALE OF POINTS FOR DORSET HORN SHEEP.

GENERAL APPEARANCE:—Head well up, eyes bright and alert, and standing square on legs	20
CHEST:—Broad, full, brisket well forward	10
BACK:—Broad, straight, with well spring ribs	15
QUARTERS:—Heavy, square, set on short, straight legs, well apart	10
LEGS:—White, with small, light colored hoof	5
HEAD:—Small, face white, nostrils well expanded, nose and lips pink in color	5
NECK:—Short and round, set well on shoulders	5
HORN:—Neat, curving forward, and light in color	10
FORE TOP:—Good, and well covered on belly and legs	10
WOOL:—Medium quality, and good weight, presenting an even, smooth, white surface	10
Total	100

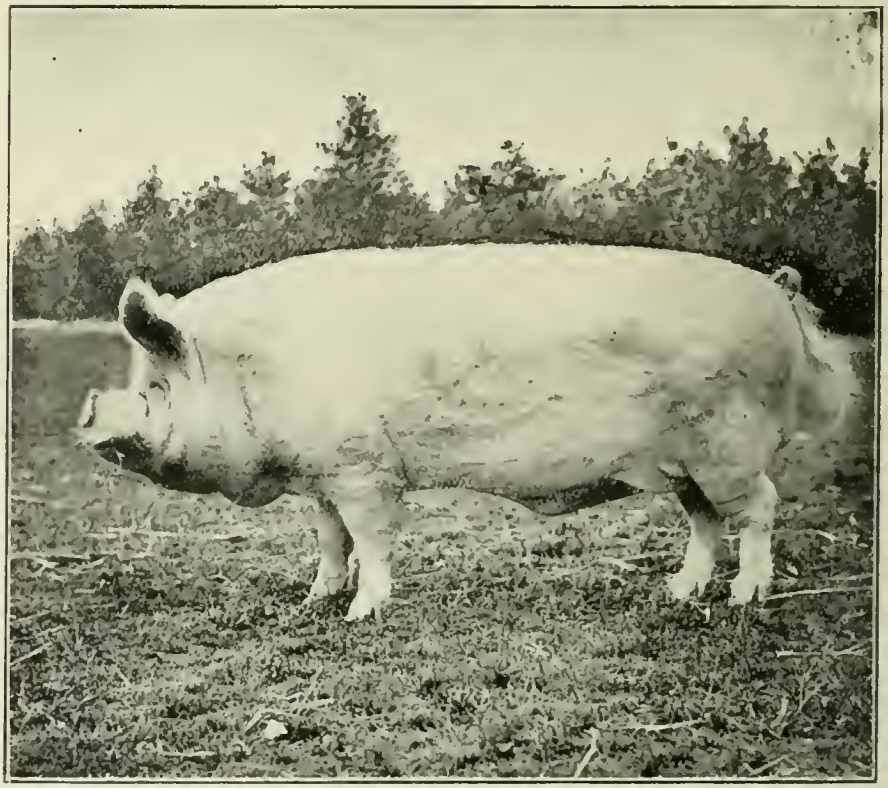
Dorset Horned Ram.



Dorset Horned Ewe.

SCALE OF POINTS FOR YORKSHIRES.

COLOR:—White, free from black hairs, and as free as possible from blue spots on the skin	2
HEAD AND NECK	10
Face—slightly dished, broad between eyes, poll wide and prominent	2
Snout—moderately strong but not coarse, of medium length, turning upward with slight curve	1
Eyes—good size, full and bright and wide apart	1
Jowl—neat form and of medium size without flabbiness, having good width at the angles of the jaw	2
Neck—medium length and muscular, with little tendency to arch on top in the case of sows and barrows	3
Ear—medium to large in size, with fine fringe, standing well out from the head, not drooping, and inclining sightly forward	1



Yorkshire Boar.

FOREQUARTERS	14
Shoulders—full, smooth, rounded from side to side, not open on top, compact, no wider than back	8
Breast—good width and full; chest full and low	4
Fore-legs—set well apart, medium length and straight; pasterns upright, bone clean and moderately fine; feet compact without tendency to spread when walking	2

BODY 40

Back—medium width, rising slightly above the straight line and forming a very slight arch from neck to tail..... 9
Loin—muscular and full, but not unduly arched, wide as rest of back 5
Ribs—well arched from back, dropping straight, giving flatness to the side 3
Side—deep, long, smooth and straight between shoulder and ham, a straight edge laid over shoulder point and ham should touch the side throughout 12
Heart-girth—full, but without flabbiness or wrinkling; there should be no tucked-up appearance back of fore-legs, nor slackness back of shoulder top 5
Flank—full and low 1
Underline—straight; the belly should be markedly trim and neat except in case of broad sows 5

Yorkshire Sow.

HINDQUARTERS 14

Rump—same width as back, long and slightly rounded from a point above hips to tail, and rounded from side to side over top 5
Ham—full without flabbiness, thigh tapering toward hock, carrying flesh well down both inside and outside of bone... 4
Hind Legs—medium length, hocks set well apart but not bowed outwards; pasterns strong and upright; feet, compact without tendency to spread when walking..... 4
Tail—set high, medium strength, inclined to curl, with tassel of fine hair 1

QUALITY 45

Ear—rather thin, firm and of medium size (1) hair, fine and abundant without curl or bristles (2); skin, smooth, showing no tendency to wrinkle (3); bone, strong and clean in legs, moderately fine in snout and head, and showing no prominence on side and top of shoulder (4); flesh, firm and smooth, with no flabbiness at jowl, fore-flank, belly or ham (5) 15

STYLE 5

Active in movement, walking without a swaying motion and standing well up on pasterns 5

Perfection 100

Objections:—Narrow or excessively broad or sagging back; too thin or too short, thick or arching neck; sagging belly except in brood sows; small cramped chest; pronounced depression back of shoulder; heavy shoulder; heavy shields on shoulders of boars; wrinkled skin; crooked or deformed legs or feet; black hairs, black spots, curly coat or swirls; very short or very long snout.

SCALE OF POINTS FOR TAMWORTHS.

COLOR:—Red or bright chestnut on flesh-coloured skin, free from black spots 2

HEAD AND NECK 9

Snout—moderately fine, long and quite straight 1
Face—slightly dished, poll wide and prominent 1
Eyes—good size, full and bright, and moderately wide apart 1
Jowl—light and neat 3
Neck—medium length, deep and rather light, with no tendency to arch on top 2
Ear—rather long with fine fringe, carried rigid but inclined slightly forward 1

FORE-QUARTERS 15

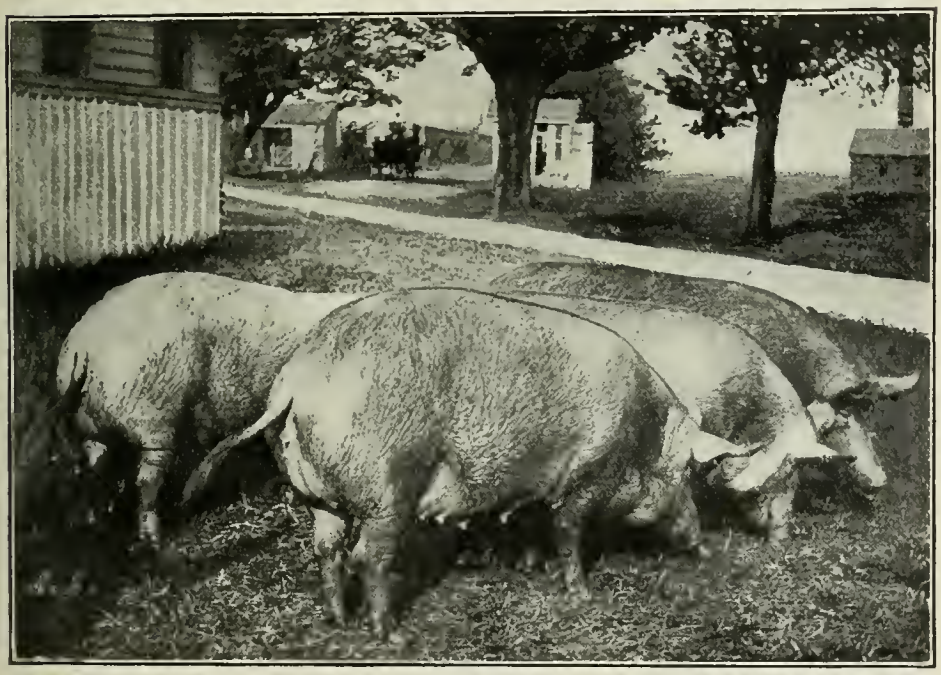
Shoulders—light and smooth, rounded from side to side over top and very compact, no wider than back 8
Breast—good width and full; floor of chest well let down. 5
Fore-legs—set well apart, medium length and straight, pasterns upright, bone clean and moderately fine, feet compact without tendency to spread when walking..... 2

BODY 40

Back—medium width, rising slightly above the straight line and forming a slight arch from neck to tail 8
Loin—strong and full, but not unduly arched, wide as rest of back 5
Ribs—good length, well arched from back, falling straight, giving flat, deep side 4
Side—deep, long, smooth and straight between shoulder and ham, a straight edge laid over shoulder point and ham should touch the side throughout 12

Heart-girth—full but not flabby; there should be no tucked up appearance back of fore legs, nor slackness back of shoulder top 5
Flank—full and low 1
Underline—straight; the belly should be markedly trim and neat except in case of brood sows 5

HIND-QUARTERS 14
Rump—same width as back, long and slightly rounded from a point above hips to tail and rounded from side to side over top 5
Ham—full without flabbiness; thigh tapering towards hock, carrying flesh well down both inside and outside of bone... 4
Hind-legs—medium length, hocks set well apart but not bowed outward; bone clean and moderately fine; pasterns strong and upright; feet compact without tendency to spread when walking 4
Tail—set high, inclined to curl, medium length and strength, tasseled 1



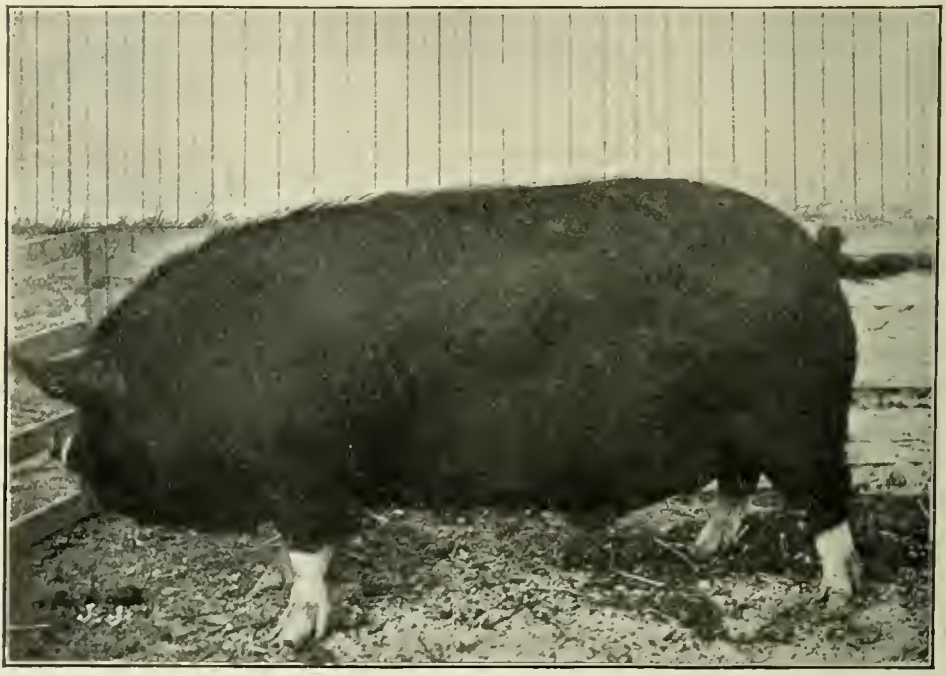
Tamworth Sows.

QUALITY 15
Ear—rather thin, fringed, firm and of medium size (1) hair fine and abundant and free from bristles (2); skin smooth, showing no tendency to wrinkle (3); bone clean in legs, moderately fine in snout and head and showing no prominence on side and top of shoulder (4); flesh firm and smooth, with no flabbiness at jowl, fore flank, belly or ham (5) 15

STYLE 5
Active in movement, walking without a swaying motion and standing well up on pasterns 5

Perfection 100

Objections:—Narrow or excessively broad or sagging back; too thin or too short, thick or arching neck; sagging belly except in brood sows; small cramped chest; pronounced depression back of shoulder; heavy shoulder; prominent shields on boars; wrinkled skin; crooked or deformed legs or feet; short or turned up snout; black or very light or curly hair, or swirls; slouch or drooping ears.



Berkshire Boar.

SCALE OF POINTS FOR BERKSHIRES.

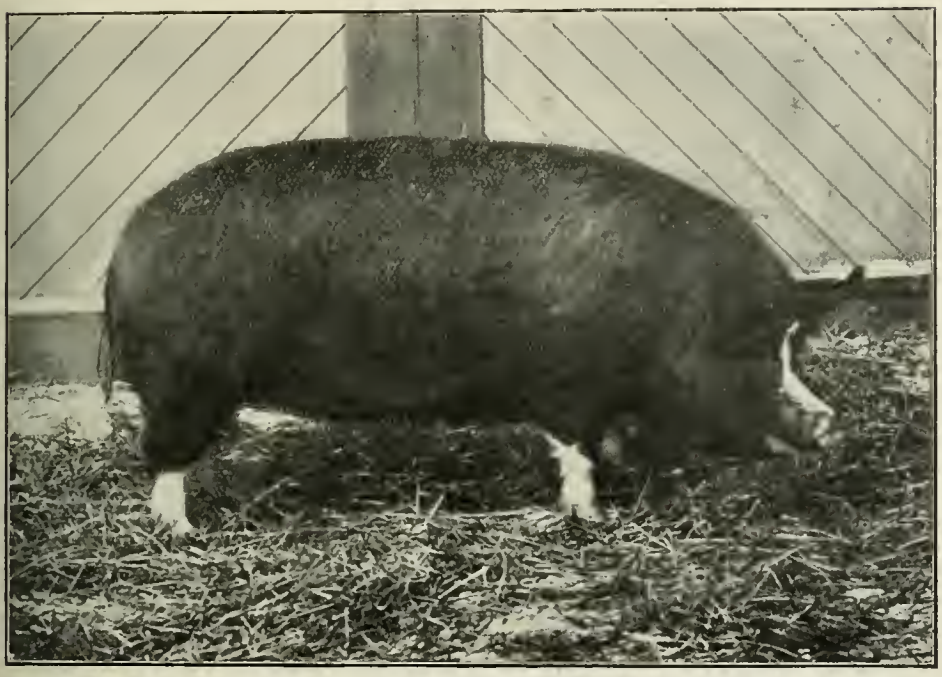
COLOR:—Black, with white on feet, face and tip of tail, and an occasional small splash on the arm 2
HEAD AND NECK 9
Snout—of medium strength and fine; face moderately dished 1
Poll—broad and prominent 1
Eyes—good size, full, and bright 1
Jowl—moderately full, firm and neat 3
Neck—medium length and fulness, with no tendency to arch on top in the case of sows and barrows 2
Ears—generally almost erect, but sometimes inclined forward with advancing age 1

FORE-QUARTERS 15

Shoulders—neat and smooth, rounded from side to side over top and very compact; no wider than back 9

Breast—good width and full, chest full and low 4

Fore-legs—set well apart, medium length and straight, pasterns upright, bone clean and moderately fine; feet compact without tendency to spread when walking..... 2



Berkshire Sow.

BODY 40

Back—medium width, rising slightly above the straight line and forming a very slight arch from neck to tail... 9

Loin—strong and full but not unduly arched; wide as rest of back 5

Ribs—good length and well arched 3

Side—deep, long, smooth and straight between shoulder and ham; a straight edge laid over should point and ham should touch the side throughout 12

Heart-girth—full but not flabby at fore flanks; there should be no tucked up appearance back of fore legs nor slackness back of shoulder top 5

Flank—full and low 1

Underline—straight; the belly should be markedly trim and neat except in case of brood sows 5

HIND-QUARTERS 14

Rump—same width as back, long and slightly rounded from a point above hips to tail, and rounded from side to side over top 5

Ham—full without flabbiness; thigh tapering towards hock, carrying flesh well down	4	
Hind legs—medium length, hocks set well apart but not bowed outward; bone clean and moderately strong, pasterns strong and upright, feet compact without tendency to spread when walking	4	
Tail—well set up on line with back, tapering, bearing white tassel	1	
QUALITY		15
Ear—rather thin, firm and of medium size (1); hair fine, abundant and free from bristles (2); skin smooth, showing no tendency to wrinkle (3); bone clean in legs, moderately fine in snout and head, and showing no prominence on side and top of shoulder (4); flesh firm and smooth, with no flabbiness at jowl, fore flank, belly, or ham (5)	15	
STYLE		5
Active in movement, walking without a swaying motion and standing well up on pasterns	5	
Perfection		100

Objections:—Narrow or excessively fat, broad or sagging back; too thin or too short, thick or aching neck; sagging belly except in brood sows; small cramped chest; heavy shoulder; prominent shields on boars; pronounced depression back of shoulders; wrinkled skin; crooked or deformed feet or legs; very large and heavy or drooping ears; black points, or white or sandy spots on body, or swirls.

COMPARATIVE STATEMENT OF GRANTS TO AGRICULTURAL SOCIETIES FOR 1907 AND 1908.

	1907.	1908.
Addington:		
Addington	$159	$120
Centreville	81	84
Algoma:		
Central Algoma	536	525
Day and Bright	34	.....
Iron Bridge	66	65
Johnson and Aberdeen	69	75
North Shore	95	95
Bruce Mines	154	143
St. Joseph Island	105	104
Thessalon	106	104
West Algoma	294	272
Emo	198	218
McIrvine and Alberton	308	.....
Oliver	204	232
Dryden	204	142
Massey	300	288
Kenora	.....	168
Brant:		
Paris	375	414
Onondaga	156	164
South Brant	399	443
Bruce:		
Paisley	290	300
Pinkerton	78	92
Huron Tp.	213	220
Kincardine	82	82
N. Bruce and Saugeen	304	318
Wiarton	122	121
Arran and Tara	166	191
Underwood	139	141
Eastnor	85	84
Tiverton	103	107
Northern	231	199
Carrick	122	139
Teeswater	189	197
Lucknow	137	178
Chesley	164	167
Carleton:		
Carleton	491	441
Fitzroy	149	138
Carp	278	296
March	61	57
Dufferin:		
Dufferin	222	217
East Luther	185	196
Dufferin Central	233	254
Dundas:		
Dundas	276	235
Mountain	199	173
Winchester	223	231
Durham:		
Millbrook	432	410
Port Hope	198	217
West Durham	348	354
Cartwright	145	155
Orono	206	202

	1907.	1908.
Elgin:		
East Elgin	439	451
Straffordville	98	102
South Dorchester	168	161
West Elgin	358	375
Aldborough	186	207
Shedden	103	99
Essex:		
Essex Co.	547	592
Comber	91	92
Amherstburg, Anderdon and Malden	159	155
Colchester South	213	219
Mersea, Leamington and South Gosfield	337	350
Frontenac:		
Frontenac	219	218
Kingston Tp.	81	97
Storrington	65	71
Wolfe Island	55	65
Parham	74	78
Kennebec	44	49
Glengarry:		
Glengarry	220	208
St. Lawrence Valley	265	264
Kenyon	177	177
Grenville:		
South Grenville	292	315
Spencerville	113	118
Grey:		
East Grey	227	.....
Priceville	94	104
Collingwood Tp.	136	171
Rocklyn	124	142
Holland	74	80
Osprey	103	101
Proton	144	151
Owen Sound	341	360
Kilsyth	153	172
Keppel	64	65
Meaford and St. Vincent	128	132
Desboro	137	144
Sydenham	113	128
South Grey	222	170
Hanover, Bentinck and Brant	108	107
Egremont	127	137
Markdale	74	106
Normanby	93	96
Walter's Falls	161	143
Haldimand:		
Haldimand	264	273
Southern Branch	105	113
Caledonia	373	367
Walpole	166	158
Canboro	39	45
Dunnville	112	112

COMPARATIVE STATEMENT —*Continued.*

	1907.	1908.
Haliburton:		
Haliburton	56	122
Glamorgan	22	42
Minden	69	150
Halton:		
Halton	394	396
Esquesing	229	231
Nassagaweya	119	135
Nelson and Burlington	149	140
Trafalgar	237	284
Hastings:		
Stirling	213	215
Marmora	121	104
Wollaston	56	55
Belleville	208	286
Tweed	187	216
Shannonville	93	93
Madoc	234	231
Bancroft	125	149
Maynooth	24	29
Dungannon and Faraday	39	40
Frankford	286	303
Huron:		
East Huron	233	251
Howick	111	111
Blyth	214	198
South Huron	215	.....
Zurich	127	124
Bayfield	103	138
Exeter	169	213
Seaforth	170	184
West Huron	296	339
Dungannon	210	211
Turnberry	166	184
Kirkton	143	148
Kent:		
East Kent	219	238
Camden	119	128
Harwich	160	133
Howard	321	334
Orford	208	213
West Kent	336	372
Wallaceburg	102	111
Raleigh and Tilbury	218	237
Romney	84	76
Lambton:		
East Lambton	307	332
Bosanquet	134	129
Brooke and Alvinston	236	250
Florence	98	122
Plympton and Wyoming	140	136
West Lambton	540	524
Petrolea and Enniskillen	319	379
Moore	243	277
Sombra	105	116
Forest	199	209

	1907.	1908.
Lanark:		
North Lanark	678	693
Dalhousie	173	180
Lanark Tp.	237	264
Pakenham	150	148
South Lanark	332	387
Lanark Village and Bathurst	156	175
Maberly	75	95
Leeds N. and Grenville:		
Merrickville	164	216
Lombardy	92	94
Frankville	179	182
Kemptville	.....	198
Leeds, South:		
Brockville	599	635
Delta	414	413
North Crosby	64	55
Lansdowne	181	184
Rear of Leeds and Lansdowne	85	95
Lennox:		
Lennox	336	340
Amherst Island	52	54
Ernestown	72	70
Lincoln:		
Monck	123	111
Abingdon	110	109
Clinton Tp.	166	166
Peninsular Central	114	74
Niagara Town and Tp.	205	212
Manitoulin:		
Gore Bay	323	315
Manitowaning	154	148
Billings	119	125
Providence Bay	84	72
Howland	82	84
Middlesex:		
Dorchester	191	204
London Tp.	187	201
Thorndale	146	170
Westminster	108	134
North Middlesex	211	215
McGillivray	49	48
Parkhill	178	155
West Middlesex	292	554
Caradoc	109	118
East Middlesex	116	.....
Delaware	106	97
Mosa and Ekfrid	133	137
Muskoka:		
North Muskoka	310	325
Stephenson and Watt	174	187
Stisted	141	136
South Muskoka	555	585
Baysville	69	84
Medora and Wood	130	158
Morrison	72	81
Gravenhurst and Muskoka	189	217

Preparing for the Stock Parade.

COMPARATIVE STATEMENT.—*Continued.*

	1907.	1908.
NIPISSING:		
Sudbury	211	.....
Bonfield	107	117
Astorville	55	76
Sturgeon Falls	281	277
Caldwell	125	113
New Liskeard	253	295
East Nipissing	373	380
NORFOLK:		
Norfolk Co.	669	649
Courtland	91	89
Townsend	114	121
Windham	124	76
Charlotteville	171	174
Houghton	122	121
North Walsingham	116	124
NORTHUMBERLAND:		
Percy Tp.	352	356
Brighton	122	122
Cramahe	248	243
Wooler	68	64
Seymour	155	179
Cobourg Central	338	367
Alnwick	136	148
Colborne	140	132
South Monaghan	62	74
ONTARIO:		
Ramona	34	34
Uxbridge	166	208
Brock	177	188
Scott	123	117
Port Perry, Reach and Scugog	48	51
Beaverton	98	109
South Ontario	325	333
OXFORD:		
Woodstock	333	360
Drumbo	298	331
East Nissouri	93	93
West Zorra and Embro	164	165
Tavistock	197	207
South Oxford	181	.....
Tillsonburg and Dereham	212	209
North Norwich	131	134
South Norwich	134	162
Ingersoll, North and West Oxford	82	113
PARRY SOUND:		
Armour, Ryerson and Burk's Falls	449	489
Magnetawan	122	138
McMurrich	66	78
Machar	194	219
Perry	152	178
Strong	132	138
Powassan	267	264
Parry Sound	281	282
United Townships	106	108
Rosseau	119	124
McKellar Tp.	159	160
Loring	98	130

	1907.	1908.
PEEL:		
Albion and Bolton	219	218
Caledon	202	215
Peel	441	439
Toronto Tp.	301	308
Toronto Gore	67	.....
PERTH:		
Stratford	190	226
Elma	125	128
Listowel	180	194
Mornington	217	211
South Perth	253	235
Fullarton, Logan and Hibbert	207	216
PETERBOROUGH:		
East Peterborough	330	352
Galway	64	61
Otonabee	126	124
Peterborough Ind.	599	560
Lakehurst	41	44
Lakefield	99	101
PRESCOTT:		
Vankleek Hill	261	273
Alfred	128	131
South Plantagenet	119	123
PRINCE EDWARD:		
Prince Edward	416	428
Ameliasburgh	153	153
Sophiasburgh	87	.....
RENFREW:		
North Renfrew	395	398
Renfrew	495	479
Radcliffe	47	.....
Cobden	103	131
Grattan and Wilberforce	.....	46
RUSSELL:		
Russell Co.	436	451
Casselman	58	51
Clarence	85	91
Russell Tp.	185	207
SIMCOE:		
Beeton	231	249
East Simcoe	252	234
Coldwater	193	189
Oro	141	154
Tiny and Tay	182	161
Cookstown	263	274
Bradford and West Gwillimbury	219	204
Alliston	228	222
Barrie	371	387
Elmvale	252	249
Nottawasaga	336	304
STORMONT:		
Cornwall	222	283
Stormont	177	161
Osnabruck	113	87
Roxborough	88	98
Finch	78	80

COMPARATIVE STATEMENT—*Concluded.*

	1907.	1908.
VICTORIA:		
North Victoria	218	207
Fenelon	98	107
Eldon	166	164
Somerville	53	.....
South Victoria	493	540
Mariposa	127	133
Verulam	121	125
WATERLOO:		
Berlin	.....	.....
Wellesley and North Easthope	199	205
Elmira and Woolwich	164	187
South Waterloo	469	478
Wilmot	202	211
WELLAND:		
Fenwick	189	200
Wainfleet	82	80
Welland	214	233
Bertie	129	129
Stamford and Niagara Falls	231	200
Thorold Town and Tp.	124	124
WELLINGTON:		
Centre Wellington	357	377
Erin	289	295
West Garafraxa	64	63
Guelph and South Wellington	800	800
Rockwood	186	183
WELLINGTON.—*Continued.*		
Puslinch	172	188
W. Wellington	183	193
Arthur	181	177
Maryborough	87	95
Palmerston	108	109
Peel and Drayton	127	133
Mount Forest	153	212
WENTWORTH:		
North Wentworth	146	.....
Rockton	297	310
Waterdown	206	227
Dundas	108	.....
South Wentworth	211	189
Ancaster	251	239
Glanford	96	103
Binbrook	98	91
Saltfleet	108	103
West Flamboro	.....	122
YORK:		
Markham	800	800
Scarboro'	332	318
Newmarket	576	592
Sutton	174	181
Queensville	115	111
Schomberg	277	282
Woodbridge	574	586
Weston, York and Etobicoke	299	246
Richmond Hill	.....	190

SPECIAL GRANTS.

INDIAN SOCIETIES:		
Six Nations	100	100
Oneida	50	.....
Chippewa	.....	75
Muncey	75	75

GRANTS TO THE CANADIAN NATIONAL EXHIBITION, THE WESTERN FAIR AND THE CENTRAL CANADA EXHIBITION.

	1907.	1908.
Canadian National	$2,500	$2,500
Western Fair	1,109	1,254
Central Canada	953	1,246
	$4,562	$5,000

GRANTS TO SPRING FAIRS, 1908.

STALLION SHOWS HELD IN 1907, $192:	
Woodstock	$48
Peel Co.	50
Cartwright	29
Howard	28
Howick	37
Total	$192

STALLION SHOWS, 1908, $1,006:	
Mornington	$29
Stratford	50
Mt. Forest	30
South Brant	50
Arthur	50
Palmerston	50
West Wellington	50

GRANTS TO SPRING FAIRS, 1908.—*Continued.*

STALLION SHOWS, ETC. *Continued.*

Wilmot Tp.	59
Collingwood Tp.	18
Elma	28
Elmira and Woolwich	50
Howick	25
East Luther	50
Erin	50
Southern Branch	10
Egremont	49
Halton	37
Bosanquet	2
Elora	50
West Kent	50
Peel Co.	50
Cornwall	29
Guelph and South Wellington	50
Walpole	24
Peninsular Central	30
Barrie	45
Total	$1,096

STALLION AND BULL SHOWS, $667:

Fullarton, Logan and Hibbert	$49
Paisley	31
Alliston	50
Maryborough	40
Arran and Tara	50
Dundas	50
East Simcoe	50
Weston, York and Etobicoke	50
Caledon	29

STALLION SHOWS, ETC. *Continued.*

Rocklyn	35
Toronto Gore	50
Paris	41
Beeton	46
West Durham	38
Cartwright	21
North Bruce and Saugeen	37
Total	$667

STALLION AND SEED FAIR:

South Waterloo	$46

STALLION, BULL AND SEED SHOWS, $285:

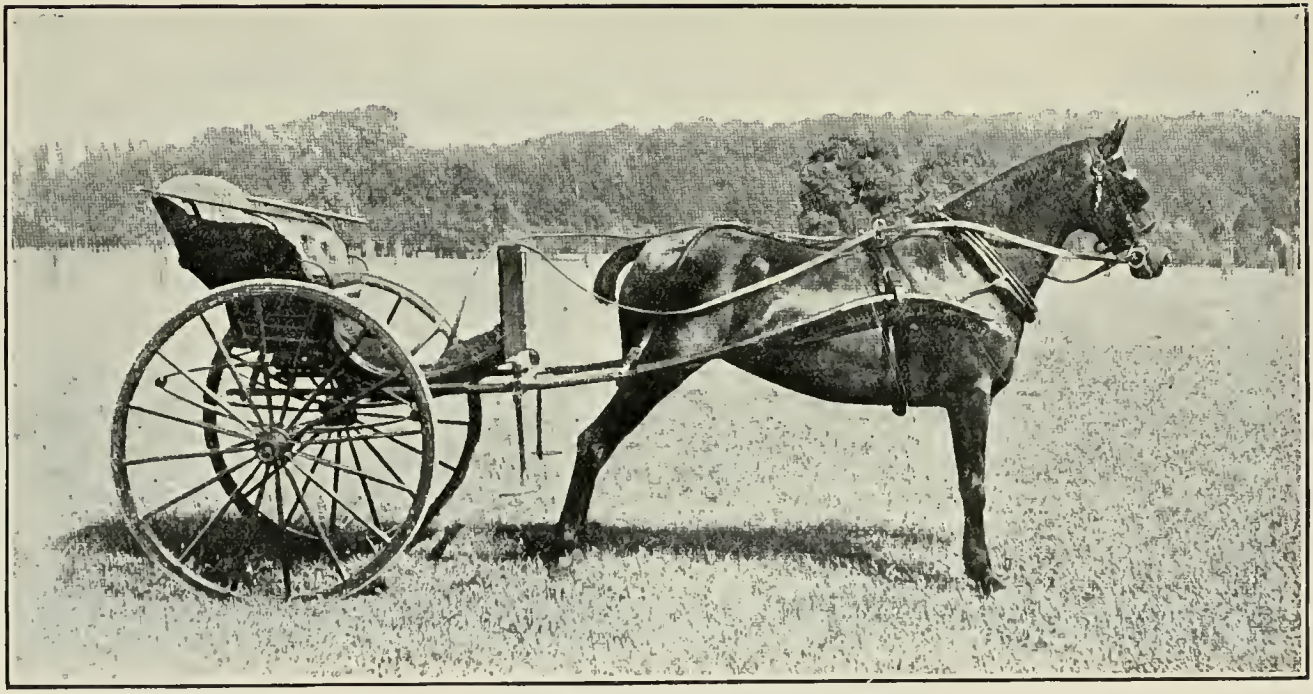
Listowel	$72
Tavistock	65
Cookstown	35
Meaford and St. Vincent	44
Blyth	69
Total	$285

SEED SHOWS, $112:

Verulam	$19
Mt. Forest	9
Tillsonburg and Dereham	25
West Wellington	18
Maryborough	7
Elora	16
Beeton	13
Richmond Hill	5
Total	$112

GRANTS TO SOCIETIES OWNING PURE BRED STOCK, 1908, $1,589.

Oldcastle	$320
South Woodslee	500
Drummond	90
Osgoode	175
Dummer and Douro	390
Ops	70
Emily	90
Lanark Village and Bathurst	20
Maberley	25
Orford	50
Verulam	20
Wooler	30
Total	$1,589



A Good Type of Gig Horse.

Reports of Agricultural Societies in Ontario, Showing the Receipts and Expenditure for the Year 1907

SOCIETIES.	Receipts.					Expenditure.				
	Members' fees retained from 1906.	Members' fees paid in 1907.	Legislative grant.	Municipal grants and donations.	Total actual receipts.	Total prize money paid.	Special attractions.	Officers' salaries.	Total actual expenditure.	Value of land and buildings.
ALGOMA—	$	$	$	$	$	$	$	$	$	$
Central Algoma	69	163	536	175	2,005	706	.....	75	1,854	7,500
Day and Bright Additional	.....	.....	34	.....	34	24	.....	.....	31	.....
Iron Bridge	26	21	66	.....	106	78	.....	7	101	.....
Johnson and Aberdeen	.....	19	69	.....	117	128	.....	.....	128	.....
North Shore	31	13	95	.....	210	144	.....	15	208	175
Bruce Mines	56	68	154	70	362	192	.....	27	304	.....
St. Joseph Island	38	27	105	25	211	148	.....	.....	175	.....
Thessalon	46	39	106	25	315	147	.....	15	1,148	1,850
West Algoma	139	470	294	930	8,674	1,922	1,602	300	7,584	4,220
Emo	40	82	198	100	605	349	.....	.....	1,223	800
McIrvine and Alberton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oliver	59	89	204	25	850	458	43	25	691	400
Dryden	.....	148	201	100	581	248	.....	.....	356	.....
Massey	.....	231	300	.....	860	371	.....	25	550	.....
BRANT—										
Paris	.....	376	375	311	2,351	1,399	40	125	2,066	5,440
Onondaga	23	60	156	95	674	533	9	25	661	45
South Brant	72	250	399	751	2,612	1,432	.....	150	2,758	4,600
BRUCE—										
Paisley	.....	149	290	160	1,494	909	371	110	1,856	.....
Pinkerton	11	82	78	100	398	297	5	25	389	300
Huron Township	97	56	213	176	1,184	648	275	65	1,317	2,500
Kincardine	56	111	82	154	951	270	176	40	1,061	.....
North Bruce and Saugeen	104	127	304	150	1,225	881	.....	62	1,243	.....
Wiarton	.....	154	122	254	766	363	92	10	777	1,400
Arran and Tara	109	150	166	231	1,215	666	30	55	1,319	1,370
Underwood	77	19	139	166	560	439	.....	33	562	250
Eastnor	58	66	85	90	520	254	.....	37	539	825
Tiverton	64	40	103	105	491	330	.....	48	600	646

BRUCE—*Continued*										
Northern	75	32	231	252	1,425	562	482	45	1,381	.....
Carrick	59	152	122	169	611	461	20	20	598	.....
Teeswater	99	41	189	212	1,009	611	99	45	982	875
Lucknow	77	39	137	274	1,072	539	77	35	1,034	1,350
Chesley	102	17	161	155	834	541	185	15	915	550
CARLETON—										
Carleton County	.....	686	491	600	2,662	1,137	430	100	2,688	5,150
Fitzroy	57	81	149	133	541	347	.....	25	481	615
Carp	54	77	278	279	1,262	945	58	50	1,321	2,250
March	.....	73	61	50	187	150	.....	15	184	.....
DUFFERIN—										
Dufferin	91	182	222	355	1,553	694	.....	110	1,880	3,865
East Luther	68	135	185	255	1,470	604	30	50	1,129	1,900
Dufferin Central	106	107	233	430	2,736	793	80	64	3,467	2,795
DUNDAS—										
Dundas	87	240	276	133	1,309	393	230	100	1,316	1,675
Matilda	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mountain	104	192	199	71	1,139	508	240	50	1,133	550
Winchester	88	146	223	325	1,823	644	584	75	1,820	4,675
DURHAM—										
Millbrook	106	69	432	117	2,034	1,174	288	105	2,308	.....
Port Hope	74	72	198	208	972	709	.....	75	1,091	600
West Durham	80	140	348	221	1,827	1,087	180	90	1,771	400
Cartwright	55	77	145	50	660	519	.....	32	652	.....
Orono	90	41	206	174	1,021	625	158	50	1,049	.....
ELGIN—										
East Elgin	.....	1,090	439	735	4,399	1,324	875	300	4,536	.....
Straffordville	2	146	98	70	513	320	15	30	456	500
South Dorchester	.....	241	168	125	854	500	.....	40	702	.....
West Elgin	155	52	358	295	1,856	1,164	.....	90	2,061	2,400
Aldboro	92	26	186	198	1,197	658	175	50	1,112	2,020
Shedden	54	42	103	153	467	312	.....	48	457	125
ESSEX—										
Essex County	136	243	145	595	3,093	1,771	320	135	3,028	2,500
Comber	70	63	91	119	660	267	132	50	634	3,000
Amherstburg, Anderdon and Malden	62	114	159	293	879	448	58	40	1,485	2,400
Colchester North	.....	89	102	.....	247	.....	.....	20	232	.....
Colchester South	81	97	213	100	1,131	690	.....	40	1,383	4,720
Mersea, Leamington and South Gosfield	155	534	337	100	2,697	1,071	852	45	4,406	6,900

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FRONTENAC—	$	$	$	$	$	$	$	$	$	$
Frontenac	70	15	210	112	737	612	.....	25	734	.....
Kingston Township	51	24	81	75	593	369	79	40	637	.....
Storrington	27	29	65	966	1,467	259	10	20	1,511	1,250
Wolfe Island	34	.....	55	96	434	242	135	25	414	.....
Parham	31	41	74	75	437	202	50	21	412	650
Kennebec	39	16	44	50	167	167	.....	24	218	.....
GLENGARRY										
Glengarry	81	215	220	112	913	594	55	91	1,037	.....
St. Lawrence Valley	107	208	265	268	1,958	764	.....	30	1,989	1,650
Kenyon	67	45	177	.....	636	471	25	35	2,316	2,325
GRENVILLE—										
South Grenville	85	187	292	664	2,881	1,130	670	250	3,061	11,300
Spencerville	102	62	113	89	877	374	143	35	672	700
Merrickville	102	48	217	402	1,397	670	116	70	1,405	250
Kemptville	109	42	106	273	1,058	693	214	40	1,191	1,325
GREY—										
East Grey										
Priceville	54	43	94	81	487	331	.....	25	510	360
Collingwood Township	65	147	136	230	864	664	20	30	927	75
Rocklyn	46	156	124	146	855	528	.....	37	743	3,720
Holland	35	82	74	80	437	251	15	25	401	1,050
Osprey	66	29	103	51	658	314	93	35	671	580
Proton	53	91	141	150	1,090	492	15	40	766	2,250
Owen Sound	119	82	341	602	3,247	1,058	376	200	3,602	6,000
Kilsyth	60	126	153	122	742	501	.....	30	1,067	1,230
Keppel	47	30	64	93	331	191	.....	30	362	75
Meaford and St. Vincent	56	156	128	93	1,561	380	.....	30	1,416	9,000
Desboro	88	75	137	114	584	439	20	22	583	.....

GREY—*Continued.*										
Sydenham	53	86	113	194	545	430	.....	35	558	500
South Grey	70	68	222	136	738	136	157	120	899	4,400
Hanover, Bentinck and Brant	41	136	108	16	762	359	181	36	804	2,550
Egremont	64	65	127	196	922	429	35	28	731	1,910
Markdale	55	39	74	145	677	348	.....	55	633	.....
Normanby	63	86	98	63	521	271	.....	29	408	.....
Walter's Falls	61	106	161	116	741	410	30	50	723	700
HALDIMAND—										
Haldimand	.....	247	264	156	1,457	825	167	90	1,606	2,675
Southern Branch	.....	123	105	66	545	354	20	20	506	50
Caledonia	77	171	373	127	3,077	1,100	565	168	2,904	4,200
Walpole	.....	179	166	194	908	432	74	75	884	525
Canboro	.....	50	39	71	201	152	.....	10	208	310
Dunnville	.....	331	112	153	1,466	398	280	70	1,083	4,300
HALIBURTON										
Deer Lake	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Haliburton	31	28	116	.....	214	189	..	15	218	.....
Glamorgan	.....	30	66	.....	113	63	.....	4	79	240
Minden	30	24	112	10	300	183	.....	15	255	520
HALTON—										
Halton	85	134	394	523	2,113	1,257	74	115	1,659	4,000
Esquesing	73	144	220	275	1,199	653	25	40	910	.....
Nassagaweya	.....	101	119	243	665	511	25	30	635	.....
Nelson and Burlington	49	180	149	184	671	356	.....	40	670	.....
Trafalgar	81	63	237	425	1,637	1,093	50	75	1,522	500
HASTINGS—										
Stirling	91	63	213	105	1,061	718	.....	67	1,113	750
Marmora	41	67	121	.....	201	.....	.....	.....	102	1,850
Wollaston	32	34	56	49	186	145	.. ..	12	201	40
Belleville	55	104	208	300	1,438	1,078	.....	125	1,696	.....
Tweed	81	77	187	42	671	665	.....	40	745	.....
Shannonville	28	43	93	113	314	250	10	70	454	450
Madoc	105	66	234	197	1,340	669	153	40	1,413	100
Bancroft	55	89	125	124	1,063	476	127	40	1,484	1,765
Maynooth	18	52	24	.. ....	132	115	.....	24	158	.....
Dungannon and Faraday	26	60	39	.....	146	141	.....	12	193	.....
Frankford	78	45	286	95	1,439	895	15	75	1,756	6,800
HURON—										
East Huron	80	139	233	55	1,392	767	244	50	1,315	5,700

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HURON—*Continued.*	$	$	$	$	$	$	$	$	$	$
Howick	48	48	111	75	523	336	.....	35	506	500
Blyth	63	77	214	194	1,420	533	25	50	998	3,435
South Huron	.....	60	215	.....	307	.....	.....	60	266	.....
Zurich	56	127	127	25	680	379	30	24	639	1,600
Bayfield	61	69	103	45	611	340	97	28	641	1,000
Exeter	.....	268	169	95	1,312	805	71	35	1,284	3,890
Seaforth	50	211	170	20	1,238	689	.....	50	1,055	2,000
W. Huron	64	319	296	235	2,292	1,059	360	90	2,089	.....
Dungannon	132	31	210	100	1,154	628	114	35	1,079	.....
Turnberry	89	93	166	51	822	585	50	50	870	695
Kirkton	43	176	143	155	817	492	125	40	790	1,800
KENT—										
E. Kent	107	229	219	166	3,173	783	552	120	2,356	5,050
Camden	66	40	119	180	905	379	200	35	940	2,050
Harwich	66	69	160	373	1,232	365	70	65	1,071	3,100
Howard	112	183	321	275	1,784	1,154	60	80	1,705	5,600
Orford	112	121	208	215	1,009	530	.....	60	794	1,800
W. Kent	76	199	336	1,112	3,418	1,262	646	50	3,667	11,350
Wallaceburg	47	26	102	260	598	409	.....	45	654	3,420
Raleigh & Tilbury	57	125	218	197	1,329	312	190	65	1,907	800
Romney	31	137	81	156	494	268	116	54	1,011	2,135
LAMBTON—										
E. Lambton	105	86	307	312	1,411	1,060	135	50	1,545	.....
Bosanquet	52	126	134	141	747	350	110	30	581	600
Brooke and Alvinston	127	98	236	203	1,503	794	174	61	1,425	3,800
Florence	61	75	98	65	386	280	.....	25	372	450
Plympton and Wyoming	52	70	140	100	117	355	.....	25	527	650
W. Lambton	132	173	540	1,003	2,438	1,167	466	320	2,493	5,200
Petrolia and Enniskillen	137	145	319	745	3,268	1,229	501	100	3,257	3,200

LAMBTON—*Continued.*										
Moore	61	314	243	243	1,508	922	208	50	1,600	.....
Sombra	80	50	105	80	577	391	.....	50	575	385
Forest	81	122	199	160	997	626	85	85	969	.....
LANARK—										
N. Lanark	87	217	678	1,085	5,358	2,161	909	195	5,642	17,950
Dalhousie	60	112	173	30	888	312	25	35	866	1,565
Lanark Tp.	64	50	237	175	1,290	423	35	40	1,096	1,085
Pakenham	44	96	150	199	791	419	.....	40	672	.....
S. Lanark	67	75	332	1,097	2,930	1,183	270	135	3,013	7,600
Lanark Village and Bathurst	58	82	156	297	1,340	619	334	85	1,417	285
Maberley	36	35	75	89	652	253	29	34	683	925
LEEDS—										
Lombardy	77	44	92	25	477	186	.....	25	479	70
Frankville	203	31	179	45	1,136	568	138	55	1,180	935
Brockville	163	176	599	286	5,590	1,904	1,319	415	5,571	3,320
Delta	87	41	414	446	1,815	1,079	427	85	2,438	4,100
North Crosby	42	33	64	48	282	206	87	30	407	.....
Lansdowne	75	112	181	77	1,675	498	233	75	1,186	4,900
Rear of Leeds and Lansdowne	53	42	85	185	700	352	160	43	779	700
LENNOX AND ADDINGTON—										
Lennox	30	184	336	.....	1,391	1,015	25	100	1,490	3,250
Amherst Island	6	41	52	.....	195	162	.....	10	201	.....
Ernestown	.....	64	72	115	338	163	.....	18	271	.....
Addington	.....	.....	159	.....	.....	164	.....	.....	241	.....
Centreville	55	121	81	.....	255	256	.....	5	298	.....
LINCOLN—										
Monck	36	88	123	97	559	399	95	35	680	1,835
Clinton Tp.	.....	186	166	126	958	437	30	60	1,002	2,415
Grantham	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Peninsular Central	.....	143	114	182	460	7	.....	65	289	1,690
Niagara Town and Tp.	42	62	205	210	586	481	.....	40	695	250
Abingdon	60	120	110	50	514	328	12	35	471	1,000
MANITOULIN—										
Gore Bay	72	17	323	34	665	478	.....	65	786	2,000
Manitowaning	46	48	154	25	415	244	16	40	363	650
Billings	53	23	119	41	264	191	.....	12	246	.....
Providence Bay	29	11	84	12	151	82	12	15	141	.....
Howland	28	75	82	25	274	148	.....	25	234	200

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MIDDLESEX—	$	$	$	$	$	$	$	$	$	$
Dorchester	.....	226	191	153	1,198	584	.....	50	932	1,005
London Tp.	60	251	187	50	721	584	.....	50	781	485
Thorndale	.....	265	146	261	996	532	90	40	887	650
Westminster	.....	235	108	200	694	482	28	35	655	95
N. Middlesex	94	56	211	62	851	674	.....	.....	931	475
McGillivray	29	31	49	33	305	136	.....	25	293	.....
Parkhill	64	40	178	131	1,056	398	136	68	831	2,203
W. Middlesex	100	191	515	342	3,372	1,680	262	100	3,249	8,200
Caradoc	34	364	109	380	1,103	344	62	33	1,008	1,000
Delaware	.....	191	106	160	502	231	.....	20	446	.....
Mosa and Ekfrid	75	102	133	357	1,276	143	275	45	1,156	1,970
London District	.....	292	111	.....	403	.....	.....	25	403	.....
E. Middlesex	.....	128	116	.....	244	.....	.....	50	244	.....
MUSKOKA—										
N. Muskoka	67	15	310	116	710	511	20	40	777	3,000
Stephenson and Watt	46	38	174	68	535	295	.....	30	587	200
Stisted	39	28	111	56	266	197	.....	12	242	265
S. Muskoka	95	31	555	182	1,288	912	35	60	1,640	950
Baysville	.....	42	69	13	152	127	.....	7	171	10
Medore and Wood	35	45	130	68	316	238	.....	10	282	.....
Morrison	31	30	72	17	206	130	.....	16	271	575
Gravenhurst	39	34	189	145	711	423	171	25	737	.....
NIPISSING—										
Sudbury	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
East Nipissing	39	36	373	5	541	512	35	60	758	1,000
Bonfield	28	12	107	63	218	156	.....	28	327	1,500
Astorville	22	4	55	173	232	168	.....	27	261	400
Sturgeon Falls	44	32	281	.....	525	404	.....	40	548	4,500
Caldwell	34	11	125	25	195	133	.....	20	232	.....

NIPISSING—*Continued.*										
Widdifield										
New Liskeard	56	75	253	195	1,117	446		60	3,298	3,440
NORFOLK—										
Norfolk Co.		392	669	465	3,457	1,820		250	5,759	12,700
Courtland		167	91	7	364	250	20	30	429	
Townsend		139	114	176	617	388		55	586	1,650
Windham		158	124	8	518	323	46	25	497	350
Charlotteville	66	102	171	61	732	560	12	50	760	5,600
Houghton		171	122	41	637	347		25	640	1,200
N. Walsingham		241	116	97	638	391		40	588	200
NORTHUMBERLAND—										
Percy Tp.	55	52	352	123	1,541	1,011	51	75	1,345	4,025
Brighton	54	32	122	120	904	311	199	30	835	
Cramahe	101	36	248	166	1,185	621		30	888	
Wooler	50	55	68	52	365	220		25	410	
Seymour	69	164	155	200	1,080	604	89	85	1,120	2,085
Cobourg Central	110	68	338	213	1,184	1,118	46	75	1,539	8,010
Alnwick	67	38	136	120	683	494		25	681	875
Colborne	81	45	140	60	797	693		30	886	800
S. Monaghan	34	40	62	65	261	257		20	312	200
ONTARIO—										
Ramona	17	12	34	7	113	101		12	150	335
Uxbridge	74	88	166	302	1,628	669	363	119	1,844	
Brock	59	50	177	430	1,210	584	124	40	1,344	
Scott	39	84	123	164	724	327	17	28	460	
Pt. Perry, Reach and Scugog		80	48	35	258	159		40	234	
Beaverton	111	47	98	185	621	383	15	35	748	
S. Ontario	104	155	326	766	3,398	1,034	792	125	4,240	3,600
OXFORD—										
Woodstock	43	217	333	276	2,691	1,163	341	100	2,485	720
Drumbo		201	298	307	1,667	1,094		60	503	275
W. Zorra and Embro		255	164	63	880	516	45	20	722	95
E. Missouri	23	160	93	116	558	309	88	20	524	
Tavistock	100	70	197	158	1,078	633		40	928	400
S. Oxford		80	181		689	795		100	2,027	
Tillsonburg and Dereham		370	212	45	1,586	733	318	100	1,532	
N. Norwich		199	131	160	863	504		40	816	2,000
Ingersoll, N. and W. Oxford		189	82	156	1,233	520	225	67	925	
S. Norwich		186	134	338	1,004	392	57	40	759	300

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PARRY SOUND	$	$	$	$	$	$	$	$	$	$
Armour, Ryerson, and Burk's Falls	87	44	419	190	1,068	737	.....	75	1,029	3,020
Magnetawan	32	17	122	66	318	254	.....	.....	340	500
McMurrich	36	12	66	26	171	150	.....	8	207	850
Machar	45	9	194	67	429	304	20	15	411	1,587
Perry	46	65	152	53	397	297	.....	26	416	1,630
Strong	56	25	132	10	403	191	.....	15	392	675
Powassan	64	30	267	21	540	367	.....	25	494	1,300
Parry Sound	68	97	281	186	1,165	428	133	50	1,171	5,600
United Tps	41	16	106	10	206	162	.....	15	293	.....
Rosseau	37	19	119	21	219	185	.....	20	245	.....
McKellar	59	8	159	32	479	232	.....	30	161	1,600
Loring	30	28	98	27	249	117	.....	.....	170	20
PEEL—										
Albion and Bolton	77	54	219	320	1,413	617	60	65	1,324	2,100
Peel	76	321	441	480	2,764	1,313	300	280	2,764	4,900
Toronto Tp	103	121	301	655	1,719	891	257	62	1,726	2,640
Toronto Gore	.....	70	67	60	255	.....	.....	10	226	.....
Caledon	68	66	202	459	1,118	650	61	80	1,038	610
PERTH—										
Stratford	.....	209	190	85	33	920	295	100	1,943	.....
Elma	59	56	125	46	734	402	.....	50	704	1,325
Listowel	100	72	180	191	926	576	137	60	999	175
Mornington	83	313	217	77	1,276	627	95	75	1,155	2,200
S. Perth	.....	211	253	396	1,558	626	212	130	1,545	3,250
Fullerton, Logan and Hibbert	99	156	207	217	1,149	664	.....	60	1,033	750
PETERBOROUGH—										
E. Peterborough	73	71	330	187	1,844	1,170	175	100	1,764	2,975
Dummer and Douro	.....	125	260	.....	615	.....	.....	12	729	300

PETERBOROUGH—*Continued.*										
Galway	35	41	64	39	204	171	.....	25	230	.....
Otonabee	61	47	126	152	757	364	62	20	704	1,140
Peterborough Ind	.....	278	599	836	3,023	1,302	450	106	2,966	.....
Lakehurst	36	16	41	37	147	141	.....	7	195	135
Lakefield	70	117	99	197	923	377	100	20	946	2,100
PRESCOTT—										
Vankleek Hill	98	84	261	275	1,569	863	40	100	1,975	4,020
Alfred	113	56	128	58	712	354	.....	40	713	2,800
S. Plantagenet	.....	93	119	.....	494	358	.....	30	439	200
PRINCE EDWARD—										
Prince Edward	39	439	416	123	2,844	1,246	249	100	3,336	16,400
Ameliasburg	56	120	153	54	905	479	.....	60	684	.....
Sophiasburg	49	42	87	.....	415	332	.....	20	483	100
RENFREW—										
N. Renfrew	93	197	395	125	2,406	1,265	57	100	2,437	16,000
Grattan and Wilberforce	.....	18	.....	.....	170	132	.....	50	204	1,845
Renfrew	94	294	495	686	4,400	1,509	484	125	4,640	12,585
Radcliffe	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cobden	56	101	103	66	741	467	59	30	720	1,550
RUSSELL—										
Russell Co	106	52	436	966	2,437	1,313	30	85	2,283	6,600
Casselman	41	78	58	50	570	179	150	35	1,072	1,650
Clarence	25	55	85	192	561	298	.....	25	428	1,115
Osgoode	.....	65	120	.....	185	.....	.....	.....	346	.....
Russell Tp	70	56	180	268	1,043	710	35	40	1,078	2,800
SIMCOE—										
Beeton	60	55	231	426	1,427	809	123	75	1,696	2,550
E. Simcoe	57	267	252	251	4,087	712	.....	138	1,527	9,050
Coldwater	.....	92	193	220	993	545	42	50	909	.....
Oro	46	120	141	10	681	437	.....	40	600	.....
Tiny and Tay	55	99	182	216	970	491	72	.....	812	.....
Cookstown	139	55	263	25	1,374	879	.....	90	1,307	1,350
Bradford and W. Gwillimbury	106	94	219	47	1,376	610	65	50	1,237	2,100
Alliston	79	140	238	77	1,002	650	..	55	768	175
Barrie	149	147	371	423	2,635	1,145	225	175	2,595	.....
Elmvale	83	61	252	113	1,819	737	269	135	1,483	4,925
Nottawasaga	76	73	336	78	2,426	767	331	175	2,522	.....

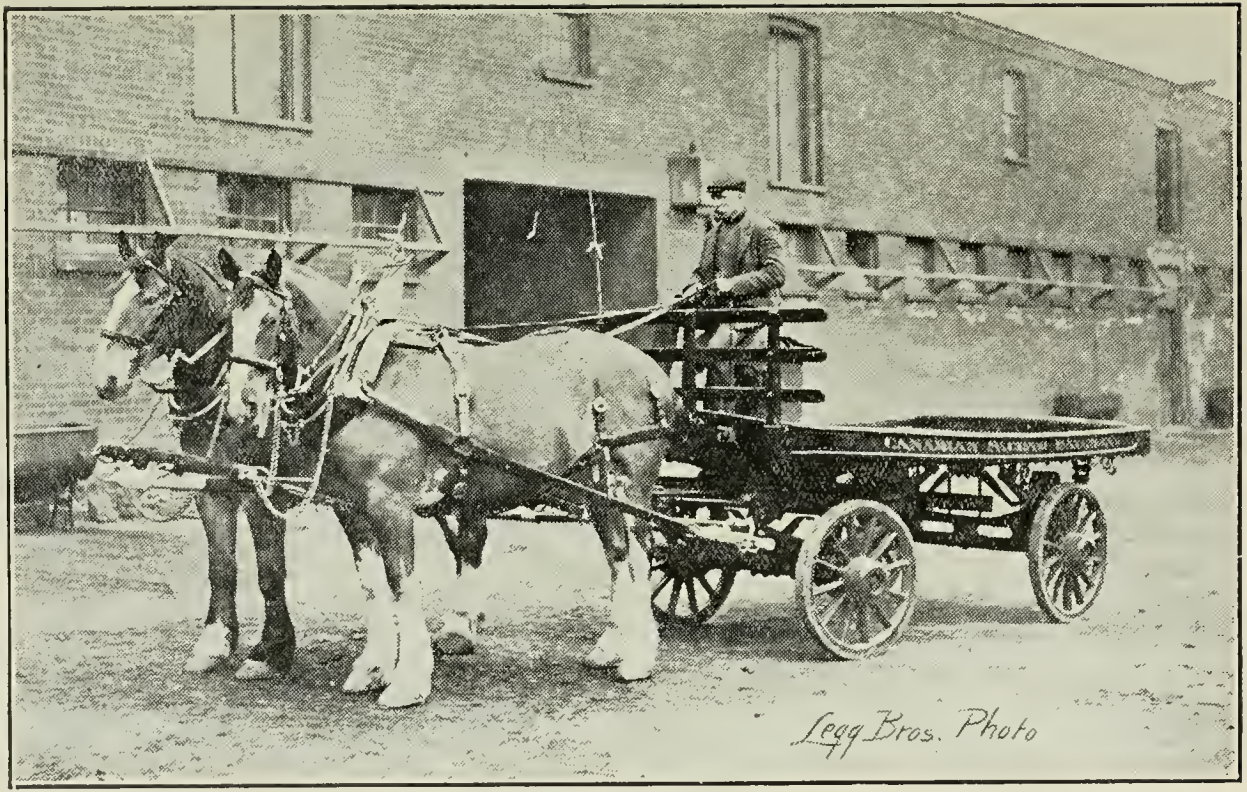
Reports of Agricultural Societies in Ontario, showing Receipts and Expenditure for the year 1907.—*Continued.*

SOCIETIES	Receipts					Expenditure				
	Members' fees retained from 1906.	Members' fees paid in 1907.	Legislative Grant.	Municipal grants and donations.	Total actual receipts.	Total prize money paid.	Special attractions.	Officers' salaries.	Total actual expenditure.	Value of land and buildings.
	$	$	$	$	$	$	$	$	$	$
STORMONT—										
Cornwall	72	207	222	699	2,395	1,272	360	85	2,292	4,250
Stormont		123	177	.....	518	370	20	20	592	.....
Osnabruck	33	49	113	61	608	124	112	25	606	.....
Roxborough		105	88	5	600	294	131	10	650	.....
Finch		90	78	3	444	238	7	15	351	.....
VICTORIA—										
N. Victoria	51	26	218	302	786	556	50	80	886	1,650
Fenelon	44	37	98	94	476	338	.....	25	469	.....
Eldon	49	65	166	263	903	401	108	13	767	.....
Somerville	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Victoria	98	194	493	729	5,128	1,679	765	285	5,436	12,900
Emily	.....	66	90	.....	168	.....	.....	15	270	..
Mariposa	63	11	127	97	620	431	60	30	674	.....
Ops	.....	70	50	.....	126	25	....	20	190	.....
Verulam	68	59	121	.....	685	396	35	25	760	1,455
WATERLOO—										
Berlin	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wellesley and N. Easthope	50	178	199	108	1,051	633	.....	25	969	1,800
Elmira and Woolwich	95	75	164	294	975	611	.....	40	2,611	3,500
S. Waterloo	.....	210	469	767	2,248	1,421	57	150	2,246	1,200
Wilmot	99	65	202	302	969	628	.....	100	984	200
WELLAND—										
Fenwick	.....	193	189	62	1,266	769	.....	80	1,194	3,825
Welland	46	198	214	666	2,226	777	259	80	1,854	2,500
Bertie	.....	171	129	.....	535	352	29	35	542	.....
Stamford and Niagara Falls	.....	109	231	310	1,342	542	171	50	1,348	1,025
Thorold Town and Tp	28	70	124	174	804	326	80	25	808	700
Waintfleet	.....	126	82	73	388	229	.....	25	355	185

WELLINGTON—										
C. Wellington	92	223	438	352	1,876	1,062	156	85	1,774	1,400
Erin		380	289	263	1,931	938	35	60	1,330	1,800
Guelph and S. Wellington	60	286	800	1,368	5,173	3,257	679	170	5,147	
Rockwood		183	186	183	937	563	34	42	799	1,050
Puslinch		340	172	358	1,112	609	35	50	1,005	
W. Wellington	105	118	183	233	948	587	30	70	891	1,500
Arthur	89	115	181	164	1198	428	192	76	993	2,200
Maryborough	62	59	87	95	654	305	175	30	663	
Palmerston	65	82	108	240	1,147	315	117	30	869	2,675
Peel and Drayton	80	70	127	564	1,210	405	228	55	1,117	
West Garafraxa	51	94	64	20	280	245		25	351	
Mt. Forest	103	309	153	112	1,308	813	120	40	1,327	
WENTWORTH—										
Rockton		338	297	480	1,926	995	145	100	1,634	
Waterdown		392	206	120	1,031	732	40	40	1,057	
W. Flamboro		158		317	905	584	54	60	901	127
S. Wentworth		124	211	250	628	345	57	79	687	
Ancaster		128	251	731	1,492	785		100	1,835	4,100
Binbrook		112	98	143	429	218	15	30	435	
Glanford		113	96	170	430	341	28	30	477	100
Saltfleet		104	108	269	663	353	77	40	677	125
YORK—										
Markham	163	162	800	1,045	4,976	2,288	498	245	4,191	10,000
Scarboro	73	59	332	1,174	1,613	911	38	100	1,438	55
Newmarket	114	853	576	347	4,711	1,825	888	175	4,451	6,750
Sutton	56	101	174	286	1,009	560	145	35	953	
Queensville	42	101	115	155	539	418		35	618	
Schomberg	97	66	277	222	1,395	777	144	50	1,260	400
Woodbridge		599	574	440	3,063	1,846	35	180	3,050	5,950
Weston, York and Etobicoke	41	142	299	484	2,259	556	125	100	2,333	1,650
INDIAN SOCIETIES—										
Six Nations	36	150	100	58	1,242	649	190	55	1,368	2,250
Chippewa									18	
Munay Tecumseh	32	11		269	134	31	33		283	700
Oneida										

ANALYSIS OF PRIZE MONEY PAID BY AGRICULTURAL SOCIETIES IN ONTARIO IN 1907.

Societies.	Horses.	Cattle.	Sheep.	Swine.	Miscellaneous.	Total.
	$ c.	c.	$ c.	$ c.	$ c.	$ c.
ALGOMA :						
Central Algoma	103 00	62 00	26 50	2 50	505 75	699 75
Day and Bright, additional			for	ploughing	match	24 00
Iron Bridge	12 25	8 25	7 00	4 50	46 00	78 00
Johnson and Aberdeen	37 75	16 00	25 50	4 25	44 50	128 00
North Shore	27 50	18 75	11 00	1 00	85 25	143 50
Bruce Mines	59 50	28 00	9 75	3 25	91 50	192 00
St. Joseph Island						148 00
Thessalon	39 00	20 00	4 25	4 00	80 00	147 25
West Algoma	185 00	208 00			1,513 50	1,921 50
Emo	105 00	40 50	14 00	5 00	184 95	349 45
McIrvine and Alberton						
Oliver	89 50	149 50	11 50	12 00	195 50	458 00
Dryden	18 00	42 00	1 00	14 00	170 25	248 25
Massey	110 42	64 50	18 16	6 50	171 25	370 83
BRANT :						
Paris	316 00	246 00	153 00	115 00	569 25	1,399 25
Onondaga	175 25	53 25	29 50	39 00	235 55	532 55
South Brant	526 50	142 00	203 00	126 50	433 50	1,431 50
BRUCE :						
Paisley	210 00	126 00	113 50	81 00	378 25	908 75
Pinkerton	94 75	37 25	19 00	12 00	134 25	297 25
Huron Tp	125 75	65 25	47 75	37 00	371 75	647 50
Kincardine	89 00	12 50	18 75	17 75	131 75	269 75
North Bruce and Saugeen	299 00	91 00	55 00	63 00	376 46	884 46
Wiarton	87 75	64 50	30 50	17 80	162 30	362 85
Arran and Tara	285 25	82 75	37 50	21 00	239 75	666 25
Underwood	102 25	101 25	39 00	38 00	158 27	438 77
Eastnor	60 00	31 00	23 00	21 75	115 25	254 00
Tiverton	70 75	56 75	39 50	22 75	140 50	330 75
Northern	116 50	69 00	39 75	17 00	353 55	595 80
Carrick	130 50	81 50	48 00	31 75	169 25	461 00
Teeswater	187 50	80 75	25 00	20 00	300 50	613 75
Lucknow	149 50	89 50	30 00	27 75	242 55	539 30
Chesley	151 00	80 00	28 00	25 50	256 10	540 60
CARLETON :						
Carleton Co	238 00	195 00	142 50	93 00	468 45	1,136 95
Fitzroy	91 00	55 00	7 00	13 50	180 25	346 75
Carp	335 00	122 00	69 00	33 00	386 00	945 00
Central Canada	3,652 00	2,679 00	862 00	924 00	2,136 30	10,253 30
March	72 80	28 00	21 60	6 40	21 00	149 80
DUFFERIN :						
Dufferin	190 00	50 00	38 50	25 20	390 75	694 45
E. Luther	238 50	70 00	37 50	25 75	232 40	604 25
Dufferin Central	222 00	108 00	60 00	35 00	442 75	867 75
DUNDAS :						
Dundas	329 00	16 00		18 00	30 00	393 00
Matilda						
Mountain	127 00	148 00	37 00	6 00	190 10	508 10
Winchester	255 25	117 90	45 50	37 50	188 05	644 20
DURHAM :						
Millbrook	357 00	160 50	88 00	80 00	488 75	1,174 25
Port Hope	150 00	170 00	87 50	57 00	250 75	709 25
West Durham	226 00	145 00	136 00	82 00	497 70	1,086 70



Good Heavy Draught Pair.

ANALYSIS OF PRIZE MONEY—*Continued.*

Societies.	Horses.	Cattle.	Sheep.	Swine.	Miscellaneous.	Total.
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
DURHAM—*Con.*						
Cartwright	196 00	50 00	54 50	24 00	194 00	518 50
Orono	209 00	77 00	73 50	55 00	210 75	625 25
ELGIN:						
East Elgin	277 75	291 00	46 25	112 25	548 75	1,331 40
Straffordville	72 25	47 75	23 50	15 75	160 85	320 10
S. Dorchester	105 50	64 50	21 50	36 00	272 50	500 00
W. Elgin	420 00	200 00	70 00	35 00	438 70	1,163 70
Aldboro	169 50	103 25	112 05	38 00	235 35	658 15
Shedden	91 75	50 50	35 50	13 00	120 90	311 65
ESSEX:						
Essex Co.	461 00	311 00	152 00	193 00	654 30	1,771 30
Oldcastle	(Stock	Society)				
South Woodslee	"	"				
Comber	62 15	37 00	28 75	22 75	116 75	267 40
Amherstburg, Anderdon and Malden	137 50	32 50	45 50	28 50	204 20	448 20
Colchester, N	(Stock	Society)				
Colchester, S.	120 50	95 00	67 00	41 25	366 65	690 40
Mersea, Leamington and S. Gosfield	174 50	126 00	150 00	112 00	503 45	1,065 95
FRONTENAC:						
Frontenac	205 50	137 75	34 50	66 50	167 25	611 50
Kingston Tp.	80 00	49 00	33 00	20 25	187 00	369 25
Storrington	80 25	30 80	20 50	21 25	76 55	229 35
Wolfe Island	80 00	12 85	10 25	18 00	120 70	241 80
Parham	33 75	35 00	11 50	17 00	104 70	201 95
Kennebec	63 50	26 75	13 50	12 00	51 30	167 05
GLENGARRY:						
Glengarry	129 00	72 50	69 00	69 50	253 95	593 95
St. Lawrence Valley	160 00	175 00	55 00	48 50	325 95	764 45
Kenyon	119 00	103 25	46 50	47 25	154 90	470 90
GRENVILLE:						
South Grenville	280 00	170 50	62 50	76 00	541 00	1,130 00
Spencerville	66 50	59 25	16 50	22 00	209 25	373 50
Merrickville	247 00	84 25	31 00	21 25	286 34	669 84
Kemptville	167 50	126 50	51 50	54 20	292 90	692 60
GREY:						
East Grey						
Priceville	63 75	47 50	46 50	11 90	161 35	331 00
Collingwood Tp.	167 50	98 50	28 00	5 00	364 75	663 75
Rocklyn	237 00	86 00	22 50	26 00	156 85	528 35
Holland	77 50	30 50	15 00	16 50	111 20	250 70
Osprey	80 00	60 00	24 00	25 00	124 50	313 50
Proton	114 50	47 75	55 00	24 50	249 75	491 50
Owen Sound	320 00	170 00	88 00	105 00	374 90	1,057 90
Kilsyth	159 00	72 25	22 25	27 00	220 80	501 30
Keppel	33 50	29 00	13 50	9 25	106 12	191 37
Meaford and St. Vincent	83 00	54 50	19 00	29 50	193 55	379 55
Desboro	102 50	78 50	32 00	27 50	198 50	439 00
Sydenham	115 50	57 25	22 50	16 00	218 50	429 75
South Grey	28 00	20 50	3 00	2 00	83 30	135 80
Hanover, Bentinck and Brant	76 00	46 25	41 00	24 50	171 00	358 75
Egremont	151 75	57 00	30 00	8 00	181 75	428 50

ANALYSIS OF PRIZE MONEY—*Continued.*

Societies.	Horses.	Cattle.	Sheep.	Swine.	Miscellaneous.	Total.
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
GREY—*Con.*						
Markdale	76 00	55 80	45 00	16 25	155 20	348 25
Normanby	38 75	22 50	14 75	16 75	178 00	270 75
Walter's Falls	124 50	76 00	25 00	19 00	165 75	410 25
HALDIMAND:						
Haldimand	357 49	77 50	82 00	20 00	288 50	825 49
Southern Branch	137 40	22 50	24 00	17 25	152 35	353 50
Caledonia	281 50	109 00	134 00	67 50	508 50	1,100 50
Walpole	154 00	62 50	16 00	22 50	177 20	432 20
Canboro	56 25	20 65	26 75	9 25	39 53	152 43
Dunnville	135 75	67 50	56 25	12 00	125 90	397 90
HALIBURTON:						
Deer Lake						
Haliburton	27 75	22 75	15 25	9 00	114 10	188 85
Glamorgan	13 20	8 40	2 10	2 80	36 40	62 90
Minden	25 25	13 25	12 50	9 00	122 70	182 70
HALTON:						
Halton	316 00	134 00	152 00	70 00	584 75	1,256 75
Esquesing	246 00	87 00	61 00	38 00	220 75	652 75
Nassagaweya	159 00	19 50	86 75	9 50	236 30	511 05
Nelson and Burlington	148 00	33 00	29 00	9 00	137 00	356 00
Trafalgar	425 00	179 00	75 00	20 00	393 75	1,092 75
HASTINGS:						
Stirling	239 75	129 25	48 25	48 50	252 25	718 00
Marmora	No exhibition.					
Wollaston	25 95	16 20	26 75	9 75	66 05	144 70
Belleville	491 00	207 00	74 75	83 00	222 50	1,078 25
Tweed	142 50	208 00	36 00	47 50	230 80	664 80
Shannonville	58 40	57 80	34 00	37 40	61 92	249 52
Madoc	129 50	134 00	19 25	38 00	348 25	669 00
Bancroft	92 50	64 00	69 00	19 50	230 60	475 60
Maynooth	30 25	25 50	5 25	7 90	47 05	114 95
Dungannon and Faraday	30 25	22 25	16 00	8 50	66 65	143 65
Frankford	309 95	132 00	104 75	63 25	285 35	895 30
HURON:						
E. Huron	144 00	99 50	39 25	27 50	456 45	766 70
Howick	94 50	40 00	39 25	20 50	141 60	335 85
Blyth	167 50	81 50	40 00	20 50	223 75	533 25
S. Huron	Spring Fair only.					
Zurich	126 50	57 00	13 25	17 25	164 90	378 90
Bayfield	80 00	37 75	33 00	16 50	172 75	340 00
Exeter	222 00	104 00	63 00	50 00	365 50	804 50
Seaforth	148 00	102 50	77 00	43 00	318 00	688 50
W. Huron	396 00	99 00	84 00	47 00	432 60	1,058 60
Dungannon	324 00	53 75	42 75	26 00	181 50	628 00
Turnberry	207 50	32 00	29 50	26 00	289 85	584 85
Kirkton	133 50	62 00	50 00	27 50	218 75	491 75
KENT:						
E. Kent	118 25	75 75	100 00	81 50	407 25	782 75
Camden	124 00	46 00	50 00	41 00	118 30	379 30
Harwich	83 25	9 00	35 75	50 25	187 00	365 25
Howard	455 00	150 00	105 00	100 00	344 35	1,154 35
Orford	139 75	81 75	64 25	41 50	203 00	530 25
W. Kent	349 00	243 50	127 00	125 50	417 40	1,262 40
Wallaceburg	57 50	50 50	44 00	32 25	224 95	409 20
Raleigh and Tilbury	102 00	62 25	21 00	34 50	122 05	341 80
Romney	40 65	34 90	48 50	25 00	118 50	267 55

ANALYSIS OF PRIZE MONEY.—*Continued.*

Societies.	Horses.	Cattle.	Sheep.	Swine.	Miscellaneous.	Total.
	$ c	$ c.	$ c.	$ c.	$ c	$ c.
LAMBTON :						
E. Lambton	162 00	254 50	113 75	71 00	458 90	1,060 15
Bosanquet	113 65	61 00	17 75	4 75	153 25	350 40
Brooke and Alvinston	271 50	135 00	69 50	40 75	277 10	793 85
Florence	38 25	38 50	36 75	26 50	140 40	280 40
Plympton and Wyoming	70 00	34 00	44 00	39 25	167 75	355 00
W Lambton	195 05	271 50	174 50	75 50	450 25	1,166 80
Petrolea and Enniskillen	250 00	297 50	200 00	79 00	402 95	1,229 45
Moore	203 50	232 00	93 50	66 25	326 30	921 55
Sombra	99 25	60 50	30 00	42 75	158 30	390 80
Forest	130 50	84 75	81 50	38 00	291 70	626 45
LANARK :						
N. Lanark	806 50	333 37	56 63	96 50	867 72	2,160 72
Dalhousie	74 25	29 75	30 75	7 25	170 00	312 00
Lanark tp	88 75	68 50	26 25	11 00	228 70	423 20
Pakenham	169 25	22 50	5 50	1 50	220 00	418 75
S. Lanark	330 40	233 85	52 75	50 75	515 70	1,183 45
Lanark Village & Bathurst	195 56	55 81	23 38	30 13	314 45	619 33
Drummond	Stock	Society				
Maberly	75 00	45 25	17 50	8 75	106 65	253 15
LEEDS :						
Lombardy	47 75	28 00	27 50	1 25	81 32	185 82
Frankville	152 65	92 70	49 75	36 00	237 01	568 11
Brockville	252 00	302 00	119 50	152 00	1,078 27	1,903 77
Delta	127 00	307 50	66 00	70 00	508 40	1,078 90
N. Crosby	68 50	29 00	8 00	5 75	94 65	205 90
Lansdowne	141 50	61 50	29 00	25 50	240 92	498 42
Rear of Leeds and Lansdowne	77 14	49 52	19 77	15 73	189 40	351 56
LENNOX AND ADDINGTON :						
Lennox	250 00	160 00	78 50	82 00	441 25	1,014 75
Amherst Island	43 35	27 00	16 50	7 00	68 45	162 30
Ernestown	58 00	16 00	14 50	5 50	69 40	163 40
Addington	40 50	21 60	21 60	14 40	66 30	164 40
Centreville	103 50	27 50	19 00	17 00	88 65	255 65
LINCOLN :						
Monck	96 50	52 00	58 75	12 75	178 86	398 86
Clinton Tp	112 50	24 50	27 85	7 50	264 95	437 30
Peninsular Central	(No exhibition on account of rain.)					
Niagara Town and Tp	132 50	29 00	23 00	10 75	285 55	480 80
Abingdon	86 50	44 50	46 75	13 25	136 95	327 95
MANITOULIN :						
Gore Bay	92 00	71 00	39 00	31 00	245 25	478 25
Manitowaning	41 90	54 00	12 00	1 00	134 75	243 65
Billings	33 50	28 50	16 50	3 75	108 50	190 75
Providence Bay	14 75	7 00	9 50	.....	50 50	81 75
Howland	43 50	11 25	10 50	9 50	73 40	148 25
MIDDLESEX :						
Western Fair	2,678 00	1,653 00	1,080 00	901 00	4,018 75	10,330 75
Dorchester	244 00	140 50	48 00	5 00	146 00	583 50
London Tp	295 00	87 00	24 00	11 00	166 50	583 50
Thorndale	260 50	80 25	21 25	16 75	141 00	531 75
Westminster	197 00	26 25	32 25	16 25	210 25	482 00

Heavy Draught Four-in-Hand.

ANALYSIS OF PRIZE MONEY.—*Continued.*

Societies.	Horses.	Cattle.	Sheep.	Swine.	Miscellaneous.	Total.
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
MIDDLESEX.—*Con.*						
N. Middlesex	207 50	70 50	52 50	16 50	327 00	674 00
McGillivray	42 25	22 00	11 50	.....	60 50	136 25
Park Hill	114 00	67 75	3 00	16 75	196 75	398 25
W. Middlesex	478 00	406 00	166 00	46 50	583 75	1,680 25
Caradoc	147 75	40 25	.....	1 00	155 05	344 05
Delaware	32 00	25 75	37 50	16 00	152 00	230 75
Mosa and Ekfrid	140 50	58 25	44 75	30 00	169 90	443 40
MUSKOKA:						
N. Muskoka	102 50	59 00	38 50	16 00	294 50	510 50
Stephenson and Watt	93 25	26 25	17 75	7 00	150 25	291 50
Stisted	32 25	20 50	12 50	5 25	126 25	196 75
S. Muskoka	208 00	84 00	53 50	34 00	532 60	912 10
Baysville	35 00	9 05	10 55	1 00	71 20	126 80
Medora and Wood	55 00	36 00	11 50	6 00	129 75	238 25
Morrison	48 50	14 00	6 50	9 50	51 80	130 30
Gravenhurst and Muskoka	80 00	46 00	2 50	12 00	282 00	422 88
NIPISSING:						
Sudbury	.....	.....	.....	.....	.....	.....
E. Nipissing	93 00	130 50	25 00	23 00	240 65	512 15
Bonfield	22 75	29 00	6 00	3 00	94 95	155 70
Astorville	51 50	34 50	2 00	8 00	72 00	168 00
Sturgeon Falls	61 25	86 50	22 00	23 00	210 95	403 70
Caldwell	25 00	41 00	5 50	8 00	53 25	132 75
Widdifield	.....	.....	.....	.....	.....	.....
New Liskeard	91 50	72 50	9 00	8 00	265 00	446 25
NORFOLK:						
Norfolk Co	152 00	249 50	172 00	70 00	876 10	1,819 60
Courtland	50 50	36 55	15 50	9 25	138 76	250 56
Townsend	174 00	22 50	16 00	16 25	159 70	388 15
Windham	95 75	69 75	32 50	23 75	101 50	323 25
Charlotteville	167 00	72 50	51 75	32 75	233 40	560 40
Houghton	98 25	49 00	33 00	17 50	149 45	347 20
N. Walsingham	120 25	56 00	23 00	25 00	166 90	391 15
NORTHUMBERLAND:						
Percy	245 00	154 75	138 55	109 75	363 15	1,011 20
Brighton	70 07	65 63	52 50	30 37	92 73	311 30
Cramahe	124 50	153 15	92 65	50 25	200 20	620 75
Wooler	35 90	45 00	26 25	12 00	101 10	220 25
Seymour	185 05	74 25	63 25	41 75	239 25	603 55
Cobourg Central	203 50	256 00	77 50	67 50	513 75	1,118 25
Alnwick	187 75	55 50	18 00	28 50	173 90	493 65
Colborne	134 50	150 50	112 75	69 25	226 10	693 10
S. Monaghan	93 25	30 75	11 75	15 50	102 25	256 50
ONTARIO:						
Ramona	40 00	11 75	6 60	3 50	38 65	100 50
Uxbridge	220 50	127 00	43 00	48 00	230 00	668 50
Brock	220 00	31 00	42 00	13 75	277 50	584 25
Scott	115 00	37 00	15 75	24 00	134 75	326 50
Pt. Perry, Reach and Scugog	103 00	.....	.....	.....	56 00	159 00
Beaverton	153 50	52 50	20 75	14 00	112 50	383 25
S. Ontario	325 00	93 00	62 00	92 00	461 53	1,033 53
OXFORD:						
Woodstock	325 00	215 00	71 00	103 00	448 75	1,162 75
Drumbo	288 00	144 00	104 50	55 50	107 25	1,094 25

ANALYSIS OF PRIZE MONEY.—*Continued.*

Societies	Horses.	Cattle.	Sheep.	Swine.	Miscellaneous.	Total.
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
OXFORD.—*Continued.*						
W. Zorra and Embro	180 00	58 00	15 00	43 00	219 50	515 50
E. Nissouri	158 50	41 00	11 00	24 00	74 30	308 80
Tavistock	252 00	57 00	34 00	51 00	238 50	632 50
S. Oxford	95 00	70 00	61 00	32 00	137 00	392 75
Tillsonburg and Dereham	233 00	98 75	59 50	34 50	307 55	733 30
N. Norwich	177 50	77 50	26 50	29 00	193 06	503 56
Ingersoll, N. & W. Oxford	189 00	59 00	60 50	23 00	188 48	519 98
S. Norwich	95 00	70 00	61 25	32 00	138 50	391 75
PARRY SOUND :						
Armour, Ryerson & Burks' Falls	143 00	92 00	81 00	19 00	401 25	736 75
Magnetawan	34 50	30 50	17 50	3 00	168 50	251 00
McMurrich	35 00	12 50	11 50	4 00	86 75	149 75
Machar	46 50	41 50	18 50	4 00	193 00	303 50
Perry	61 75	43 00	43 50	12 00	136 25	296 50
Strong	35 50	20 65	13 00	11 00	111 25	191 40
Powassan	86 50	48 00	35 00	22 00	175 25	366 75
Parry Sound	75 00	95 50	21 75	11 50	224 25	428 00
United Tps	37 50	16 75	11 75	3 75	92 00	161 75
Rosseau	44 00	21 50	6 00	.....	113 00	184 50
McKellar Tp	51 50	32 25	6 50	9 50	132 00	231 75
Loring	16 75	23 50	8 25	4 00	64 50	117 00
PEEL :						
Albion and Bolton	196 00	51 00	45 00	38 00	287 00	617 00
Peel	348 00	120 00	71 00	36 00	738 00	1,313 00
Toronto Tp	266 50	122 00	64 00	29 00	409 25	890 75
Toronto Gore	Spring fair only.					
Caledon	219 00	85 00	35 00	19 00	292 30	650 30
PERTH :						
Stratford	342 00	40 00	12 00	32 40	493 73	920 13
Elma	101 00	47 50	36 00	30 50	187 25	402 25
Listowel	186 00	47 00	46 50	25 50	271 25	576 25
Mornington	218 50	54 50	29 50	40 00	584 25	626 75
S. Perth	135 50	58 35	72 45	23 85	336 15	626 30
Fullerton, Logan & Hibbert	117 00	42 50	59 00	63 00	382 00	663 50
PETERBOROUGH :						
E. Peterborough	198 50	338 25	133 00	75 00	425 50	1,170 25
Dummer and Douro	(Stock Society)					
Galway	29 00	12 50	11 25	.....	118 30	171 05
Otonabee	109 25	47 25	47 50	25 75	134 10	363 85
Peterborough Ind	426 00	194 00	98 00	40 00	544 50	1,302 50
Lakehurst	39 50	19 75	9 75	4 00	70 80	143 80
Lakefield	140 50	41 50	33 00	14 50	147 85	377 35
PRESCOTT :						
Vankleek Hill	200 50	225 50	49 50	67 00	320 50	863 00
Alfred	106 75	65 25	23 25	14 50	144 10	353 85
S. Plantagenet	165 00	96 00	12 00	11 50	73 95	358 45
PRINCE EDWARD :						
Prince Edward	364 00	181 00	144 00	69 50	487 08	1,245 58
Ameliasburg	119 50	55 00	31 00	12 00	261 80	479 30
Sophiasburg	93 75	50 25	32 00	8 00	147 65	331 65

ANALYSIS OF PRIZE MONEY—*Continued.*

Societies.	Horses.	Cattle.	Sheep.	Swine.	Miscellaneous.	Total.
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
RENFREW :						
N. Renfrew	300 00	250 00	70 00	75 00	570 40	1,265 40
Grattan and Wilberforce	32 50	12 45	1 70	.....	82 15	138 80
Renfrew	625 45	178 50	45 20	82 35	577 31	1,508 81
Radcliffe	.....	.....	.....	.....	.....	.....
Cobden	102 00	51 50	32 00	20 00	258 35	466 85
RUSSELL :						
Russell Co	322 50	321 50	113 69	85 25	169 89	1,312 83
Casselman	84 00	28 50	4 95	7 00	54 15	178 60
Clarence	80 50	58 75	12 25	.....	146 50	298 00
Osgoode	(Stock Society)					
Russel Tp	185 25	168 50	24 25	52 50	279 75	710 25
SIMCOE :						
Beeton	226 55	114 50	135 00	78 00	254 75	808 80
E. Simcoe	236 00	105 50	76 00	53 00	241 25	711 75
Coldwater	150 00	130 00	40 00	22 50	202 45	544 95
Oro	160 00	51 35	65 00	20 00	137 70	437 05
Tiny and Tay	109 55	50 50	45 00	19 00	267 20	491 25
Cookstown	366 00	42 00	110 00	54 00	307 50	879 00
Bradford and W. Gwillimbury	126 00	48 00	71 00	24 00	340 75	609 75
Alliston	130 00	85 00	76 00	35 00	324 00	650 00
Barrie	334 00	91 00	101 00	48 00	571 00	1,145 00
Elmvale	239 00	97 00	43 00	10 00	347 50	736 50
Nottawasaga	356 65	35 50	49 00	52 90	214 75	766 90
STORMONT :						
Cornwall	202 00	109 75	40 25	21 75	898 25	1,272 00
Stormont	67 00	106 75	24 00	12 75	159 60	370 10
Osnabruck	17 00	18 50	12 80	2 30	73 70	124 30
Roxborough	50 75	82 00	12 50	19 00	129 65	.....
Finch	59 50	45 25	5 25	18 50	109 00	237 50
VICTORIA :						
N. Victoria	182 00	94 00	72 50	.....	207 25	555 75
Fenelon	94 00	44 00	28 00	10 75	161 15	338 20
Eldon	113 50	58 00	50 00	16 00	163 05	400 55
Somerville	.....	.....	.....	.....	.....	.....
S. Victoria	437 00	268 50	162 50	77 50	733 25	1,678 75
Emily	(Stock Society)					
Mariposa	155 50	49 50	42 50	33 50	149 95	430 95
Ops	(Stock Society)					
Verulam	84 50	80 50	30 00	32 00	168 80	395 80
WATERLOO :						
Berlin	.....	.....	.....	.....	.....	.....
Wellesley and N. Easthope	229 50	58 50	41 00	38 00	265 75	632 75
Elmira and Woolwich	273 00	121 00	24 50	26 60	165 25	610 75
S. Waterloo	462 00	170 00	167 50	94 00	527 50	1,121 00
Wilmot	216 50	39 00	41 00	30 00	271 25	627 75
WELLAND :						
Fenwick	230 50	63 25	87 25	17 25	370 35	768 60
Welland	260 00	65 00	60 00	25 00	366 80	776 80
Bertie	140 80	61 40	42 60	24 80	82 84	352 44
Stamford and Niagara Falls	160 50	116 00	51 40	13 00	201 37	542 27
Thorold Town and Tp	180 25	6 00	14 25	.....	125 97	326 47
Wainfleet	80 25	42 75	18 00	10 00	77 60	228 60

ANALYSIS OF PRIZE MONEY—*Continued.*

Societies.	Horses.	Cattle.	Sheep.	Swine.	Miscellaneous.	Total.
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
WELLINGTON:						
C. Wellington	321 50	155 00	54 00	36 00	495 00	1,061 50
Erin	288 90	109 50	74 00	21 00	444 35	937 75
Guelph and S. Wellington	940 50	225 00	189 00	95 00	1,807 80	3,257 30
Rockwood	212 00	70 00	32 50	13 00	235 75	563 24
Puslinch	189 50	47 25	41 75	16 00	314 50	609 00
W. Wellington	174 00	55 00	19 50	29 00	300 40	577 90
Arthur	126 00	28 00	29 00	12 00	232 55	427 55
Maryborough	120 00	29 50	7 50	8 50	139 60	305 10
Palmerston	132 00	30 00	18 00	3 50	131 00	314 50
Peel and Drayton	141 00	36 50	24 00	26 00	178 50	405 00
West Garafraxa	102 25	35 25	10 50	9 50	87 25	244 75
Mt. Forest	283 00	114 00	108 00	48 00	259 80	812 80
WENTWORTH:						
N. Wentworth						
Rockton	375 25	80 25	78 00	38 50	423 25	995 25
Waterdown	233 50	85 00	31 00	26 00	356 00	731 50
W. Flamboro	201 50	44 00	57 00	24 00	257 75	584 25
S. Wentworth	62 50	27 50	49 00	16 00	190 00	345 00
Ancaster	173 50	68 50	34 75	19 50	489 20	785 45
Binbrook	61 00	23 00	21 75	9 25	103 00	218 00
Glanford	80 25	43 25	34 75	12 50	170 15	340 90
Saltfleet	61 50	8 50	31 50	6 00	245 60	353 10
YORK:						
Markham	569 00	476 00	254 00	127 00	862 15	2,288 15
Scarboro	310 00	114 00	23 00	5 50	458 75	911 25
Newmarket	528 55	203 00	162 00	40 00	374 25	1,825 25
Sutton	213 50	79 00	50 00	24 00	193 15	559 65
Queensville	160 00	26 50	37 00	7 00	187 90	418 10
Schomberg	261 00	53 00	81 00	44 00	337 50	776 50
Woodbridge	511 09	131 50	195 00	53 00	955 75	1,846 25
Weston, York and Etobicoke	144 25	32 00	34 00	33 00	312 75	556 00
Canada National	8,424 00	7,865 00	3,055 00	2,504 00	8,353 00	30,201 00
Richmond Hill	319 00	47 00	17 50	8 00	90 00	481 50
INDIAN SOCIETIES:						
Six Nations	113 50	97 25	22 25	31 40	384 60	649 20
Chippewa						
Muncey Tecumseh	35 05	15 10	3 22	3 02	78 06	134 45
Oneida						

FALL FAIRS AND EXHIBITIONS.

LIST OF PLACES IN ONTARIO AT WHICH EXHIBITIONS ARE HELD, WITH DATES AS FAR AS REPORTED TO THE SUPERINTENDENT.

Alexandria ..... September 29 and 30.
Amherstburg ..... September 23 and 24.
Ashworth ..... September 24.
Almonte ..... Sept. 28, 29, 30, Oct. 1.
Aylmer ..... Sept. 7, 8, 9, 10, 11.
Alvinston ..... October 6 and 7.
Alliston ..... October 1 and 2.
Alfred ..... September 22 and 23.
Arthur ..... September 23 and 24.
Abingdon ..... October 13 and 14.
Avonmore ..... September 23 and 24.
Baysville ..... September 30.
Beeton ..... October 8.
Burlington ..... September 30.
Belleville ..... September 16 and 17.
Binbrook ..... October 5 and 6.
Beaverton ..... October 6 and 7.
Brighton ..... September 22.
Bancroft ..... October 1 and 2.
Blyth ..... September 29 and 30.
Bothwell's Corners ..... September 24 and 25.
Burk's Falls ..... September 24 and 25
Barrie ..... September 28, 29, 30.
Burford ..... October 6 and 7.
Brigden ..... October 6.
Bobcaygeon ..... September 29 and 30.
Berwick ..... September 10 and 11.
Beachburg ..... October 1 and 2.
Bowmanville ..... September 17 and 18.
Beamsville ..... September 28, 29, 30.
Brockville ..... Sept. 15, 16, 17, 18.
Bradford ..... October 13 and 14.
Bolton ..... October 6 and 7.
Cobourg Central ..... September 16 and 17.
Campbellford ..... October 1 and 2.
Clarksburg ..... September 29 and 30.
Cookstown ..... October 6 and 7.
Cayuga ..... September 29 and 30.
Cobden ..... September 24 and 25.
Colborne ..... October 5 and 6.
Cornwall ..... September 10, 11, 12.
Carp ..... Sept. 30, October 1.
Chatham ..... September 21, 22, 23.
Collingwood ..... Sept. 22, 23, 24, 25.
Castleton ..... September 28 and 29.
Chatsworth ..... September 17 and 18.
Caledon ..... October 8 and 9.
Campbellville ..... October 13.
Caledonia ..... October 8 and 9.
Chesley ..... September 22 and 23.
Coe Hill ..... September 23.
Dungannon ..... October 7 and 8.
Dryden ..... October 1.
Drumbo ..... September 29 and 30.
Delta ..... September 29 and 30.
Dundalk ..... October 8 and 9.
Dunnville ..... September 15 and 16.
Durham ..... September 22 and 23.
Dresden ..... October 1 and 2.
Desboro ..... September 24 and 25.
Drayton ..... October 6 and 7.
Emsdale ..... September 30.
Essex ..... September 29 and 30.
October 1.
Elmvale ..... October 5, 6, 7.
Elmira ..... September 22 and 23.
Erin ..... October 15 and 16.
Fergus ..... September 29 and 30.
Fenelon Falls ..... October 6 and 7.
Fort Erie ..... September 29 and 30.
Fordwich ..... October 3.
Feversham ..... October 6 and 7.
Florence ..... October 8 and 9.
Fenwick ..... October 8 and 9.
Frankville ..... September 24 and 25.
Grand Valley ..... October 13 and 14.
Glencoe ..... September 29 and 30.
Gore Bay ..... September 22 and 23.
Gravenhurst ..... October 1 and 2.
Galt ..... October 1 and 2.
Gooderham ..... October 1.
Hamilton (Wentworth Park) ..... September 17 and 18.
Houghton ..... October 6.
Hanover ..... September 29 and 30.
Holstein ..... September 29.
Huntsville ..... September 22 and 23.
Highgate ..... October 9 and 10.
Harrow ..... October 5 and 6.
Ilderton ..... September 25.
Ingersoll ..... September 24 and 25.
Jarvis ..... October 6 and 7.
Kirkton ..... October 1 and 2.
Kincardine ..... September 16 and 17.
Keene ..... October 6 and 7.
Kilsythe ..... October 8 and 9.
Kemble ..... September 25 and 24.
Lanark ..... September 10 and 11.
Lombardy ..... September 5.
Listowel ..... September 22 and 23.
Langton ..... October 10.
Lansdowne ..... September 24 and 25.
Lyndhurst ..... September 22 and 23.
Lion's Head ..... October 1 and 2.
Lakefield ..... September 29 and 30.
Leamington ..... September 30, Oct. 1 and 2
Lambeth ..... October 6.
London (Western Fair) ..... September 11 to 19.
Lindsay ..... September 24, 25, 26.
Meaford ..... September 24 and 25.
Mt. Forest ..... September 17 and 18.
Madoc ..... September 15 and 16.
Magnetawan ..... October 1 and 2.
Massey ..... October 1.
McDonald's Corners ..... September 25.
Murillo ..... September 30.
Manitwaning ..... October 1 and 2.
Midland ..... September 24 and 25.
Metcalfe ..... September 28 and 29.
Mattawa ..... September 24 and 25.
Marmora ..... September 22 and 23.
Morrisburg ..... September 1, 2, 3.
Maberly ..... October 1.
Merrickville ..... September 17 and 18.
Mildmay ..... September 28 and 29.
Moorefield ..... September 24 and 25.
Milton ..... October 8 and 9.

Mitchell.....September 15 and 16.
Middleville.....October 2.
Markham.....October 7, 8, 9.
Morriston.....October 6.
Maxville.....September 14 and 15.
Merlin.....October 1 and 2.
Marshville.....September 18 and 19.
Norwood.....October 13 and 14.
Newboro.....September 5 and 7.
Napanee.....September 15 and 16.
New Hamburg.....September 17 and 18.
Niagara.....September 23.
New Market.....September 30, Oct. 1 and 2.
Neustadt.....September 22 and 23.
Oakville.....October 1 and 2
Orono.....September 14 and 15.
Ohsweken.....September 30, Oct. 1 and 2.
Odessa.....October 2.
Ottawa (Central).....September 16 to 26.
Orangeville.....September 24 and 25.
Otterville.....October 2 and 3.
Orillia.....September 23, 24, 25.
Owen Sound.....September 16 and 17.
Paisley.....September 29 and 30.
Port Carling.....September 22.
Priceville.....October 1 and 2.
Perth.....September 3 and 4.
Paris.....September 24 and 25.
Picton.....September 23 and 24.
Parry Sound.....October 1 and 2.
Palmerston.....September 21 and 22.
Port Hope.....September 29 and 30.
Petrolea.....September 24, 25, 26.
Powassan.....September 23 and 24.
Peterboro.....September 17, 18, 19.
Queensville.....October 13 and 14.
Ramona.....October 7.
Ripley.....September 29 and 30.
Roblin's Mills.....October 3.
Rockton.....October 13 and 14.
Renfrew.....September 17 and 18.
Roseneath.....September 24 and 25.
Rocklyn.....October 8 and 9.
Russell.....September 14 and 15.
Rockwood.....October 1 and 2.
Rosseau.....September 29.
Straffordville.....September 16.
Sturgeons Falls.....September 23 and 24.
Spencerville.....September 29 and 30.
Shelburne.....September 22 and 23.
South River.....September 30 and October 1.
Sundridge.....October 5 and 6.
Sprucedale.....October 1.
Smithville.....September 22 and 23.
Sault Ste. Marie.....September 30, Oct. 1 and 2.
South Mountain.....September 10 and 11.
Springfield.....September 24 and 25.
Stoney Creek.....September 24 and 25.
Stirling.....September 23 and 24.
Shannonville.....September 19.
Sarnia.....September 29 and 30.
Strathroy.....September 21, 22, 23.
St. Mary's.....September 23 and 24.
Shedden.....September 30.
Streetsville.....September 30.
Stella.....September 29.
Tara.....October 6 and 7.
Thamesville.....October 5, 6, 7.
Tweed.....October 1.
Toronto (National).....August 29 to Sept. 14.
Thedford.....October 6 and 7.
Tavistock.....September 21 and 22.
Tillsonburg.....September 29 and 30.
Teeswater.....October 6 and 7.
Thorold.....October 1 and 2.
Tiverton.....October 6.
Underwood.....October 13.
Utterson.....September 30.
Udora.....October 9.
Vankleek Hill.....September 15, 16, 17.
Verner.....September 21 and 22.
Winchester.....September 8 and 9.
Walter's Falls.....September 29 and 30.
Wingham.....September 24 and 25.
Welland.....October 6 and 7.
Warkworth.....October 8 and 9.
Wyoming.....October 2 and 3.
Wallaceburg.....October 7 and 8.
Wiarton.....September 29 and 30.
Waterdown.....October 6.
Williamstown.....September 23 and 24.
Wallacetown.....October 1 and 2.
Wales.....September 22.
Woodstock.....September 24 and 25.
Watford.....October 8 and 9.
Wellandport.....October 1 and 2.
Wolfe Island.....September 22 and 23.
Wellesley.....September 15 and 16.
Wooler.....September 30.
Waterford.....October 1
Whitby.....September 22 and 23.
Windham Centre.....October 6.
Walkerton.....September 16 and 17.
Woodville.....September 17 and 18.

APPENDIX

TO

ANNUAL REPORT

OF THE

AGRICULTURAL SOCIETIES

OF THE

PROVINCE OF ONTARIO

1908

Results of Competitions in Standing Field Crops.

(PUBLISHED BY THE ONTARIO DEPARTMENT OF AGRICULTURE.)

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO.

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1908

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APPENDIX

TO

Report of Agricultural Societies, 1908

Result of Competitions in Standing Field Crops, 1908

The total value of the field crops grown in the Province of Ontario mounts to a very considerable sum every year, but this could be largely increased if proper attention were paid to the selection of seed grain, the cultivation and tillage of the soil, and the destruction of weeds, more or less noxious, which rob the growing crops of nutriment, crowd and smother them in their growth; and mature their seeds, which are found in the grain as it comes from the separator, necessitating extra labor on the part of the farmer to rid the seed grain of their unwelcome presence.

The oat crop of Ontario for the current year has been estimated at approximately 100,000,000 bushels, and that of wheat at 18,800,000 bushels, and the annual total value of all the field crops in Ontario at $140,000,000. If the yield at the present time under what are, to a considerable extent, crude and unsatisfactory methods of farming, bulks so largely (although the average yield per acre is far below what it should be), it can be easily seen how the income of the Ontario farmer would be largely increased if by better methods of land cultivation and seed selection he secured an increase of yield in his crops of even a few bushels per acre.

With the view of inaugurating an educational campaign among the farmers of Ontario on these lines, Hon. Nelson Monteith, then Minister of Agriculture, appropriated the sum of $1,000 in 1907, to be awarded as prizes to members of ten Agricultural Societies in the Province who entered for the Standing Field Crop competition. The results obtained were so encouraging, and there was such a widespread desire on the part of other Agricultural Societies to participate in the benefits to be derived therefrom, that the Minister of Agriculture this year secured a considerable larger appropriation from the Legislature for the extension of a work which is fraught with so much importance to the Agricultural interests of this Province.

OBJECTS OF THESE COMPETITIONS.

The following are the main objects aimed at in these competitions :—

(1) To stimulate a greater interest in the growing of first-class seed grain.

(2) To encourage the practice of growing seed for next year's crop in a field by itself, using only the best obtainable seed, sowing it on the cleanest and best prepared land, allowing it to ripen, and threshing and storing it separately.

(3) To obtain pure seed, i. e. free from other varieties, the presence of which can best be detected when the crop is growing.

(4) To encourage the use of seed from heavy-yielding strains.

(5) To promote the sowing of seed from clean, vigorous crops of uniform stand, with bright stiff straw.

(6) To encourage careful and intelligent farming and the production of seed free from weeds.

While, in 1907, societies could enter two crops for the competition, this year it was limited to one selected by themselves which was, in their opinion, the crop of most importance to the farmers of the district. The minimum size of the plot to be entered by each competitor was, in the case of grain crops, five, and of beans and potatoes, one acre. Selections should be made from Spring, Fall or Goose Wheat, Oats, Barley, Corn, Peas, Alsike Clover, Potatoes, Beans or any other staple crop produced for seed in Ontario.

The Competition was restricted to those who are members of Agricultural Societies, and the fields entered were to be within a radius of fifteen miles from the headquarters. Members could only compete in one Society and make but one entry. It was left optional with the Directors whether an entry fee was charged or not. In any case it was not to exceed the sum of one dollar.

Each Society offered $50 in five prizes of $15, $12, $10, $8, and $5 each. Towards this amount the Ontario Department of Agriculture contributed the sum of $30. The Societies were under no expense as regards judges, as these were provided by the Seed Branch of the Dominion Department of Agriculture.

The number of Societies which made entries this year was 46. Oats were the choice of 37 of these and there were three entries of barley, two each of potatoes and corn and single entries of goose wheat and pea beans.

In order to arrive at as great an uniformity as possible in scoring there was a meeting of judges held before they started out on their work, at which the score cards were thoroughly discussed. While there was not quite the variation noticed last year, uniformity has not yet been obtained, some judges still scoring higher than others. As, however, in these competitions, members of a Society compete among themselves, and each Society's entries are judged by one judge, the results are just the same as if the scores had been proportionately higher all round.

The total number of individual competitors in the various crops were 650, divided as follows:—Oats, 510; corn, 41; barley, 33; goose wheat, 25; pea beans, 22; and potatoes, 19. The acreage entered was in round figures 6,000.

In several cases the prevalence of weeds prevented crops, which otherwise would have scored fairly well, from taking a higher position in the list. In others, the crop had a considerable mixture of other kinds of grains, and was marked down on this account, although the total yield would have been good. Some of the competitors in their zeal for destroying weeds damaged the appearance of their crops by trampling down the grain.

Wild oats are becoming more numerous and it will require individual effort on the part of the farmer to prevent their further spread in Ontario. Another serious weed which is spreading fast and which is very hard to eradicate is the Perennial Sow Thistle.

Among weeds most frequently mentioned by the judges as found in the crops were the following: Night-flowering Catch Fly, Canada Thistle, Wormseed, Mustard, Sour Dock, Lamb's Quarters, Wild Buckwheat, Ox-eye Daisy, Prickly Annual Sow Thistle, Shepherd's Purse, Milkweed, Burdock, Ragweed, Couch Grass, Foxtail, Birdweed, and Tares.

Occasional weeds noticed were Cow Cockle, Purple Cockle, Bladder Campion, Orange Hawkweed, Mullein, and Narrow Leaf Plantain.

There is too little attention being paid to a proper rotation of crops. Oftentimes one grain crop follows another without clover or roots intervening, and it is only the natural fertility of the soil in some cases that prevents absolute failure of the crops. There should be more clover sown in Ontario and permanent pastures should receive more attention.

BENEFITS ARISING FROM THESE COMPETITIONS.

The following results will accrue from these Standing Field Crop Competitions:

1st. They are the best means for promoting the production of a high class quality of seed grain and roots.

2nd. Will tend to encourage the holding of seed fairs in the Province.

3rd. Will enforce the principal of rotation of crops.

4th. Will stimulate effort to eradicate noxious weed life.

5th. Will lead to more thorough methods of cultivating the soil.

6th. Will encourage treating of seed grain and potatoes to prevent the sqread of fungous diseases.

7th. Will show the districts in which certain kinds of grain and roots can be grown to the best advantage for furnishing pure seed to others.

8th. Will encourage farmers to look to the best sources for suitable varieties best adapted to their local conditions.

J. LOCKIE WILSON,

Superintendent of Agricultural Soeieties

RESULTS OF COMPETITIONS IN STANDING FIELD CROPS.

OATS.

Competitors in Order of Merit.	Name of variety.	General appearance.*	Freedom from weeds.	Freedom from smut, rust, blight and insects.	Freedom from other varieties and other kinds of grain.	Apparent yield and quality of grain.†	Totals of scores.
Dryden Agr. Society. *Judge—L. H. Newman.*		Max. score 20	Max. score 25	Max. score 10	Max. score 20	Max. score 25	Max. scr. 100
T. J. Latimer, Oxdrift	Siberian	18	24	6	18	22½	88½
Paul Kennedy, Dryden		18½	23	7	16	23	87½
W. J. Robinson, Oxdrift		18	23	8½	11	23	83½
Jno. A. Crerar do		13½	24	8½	17	20	83
D. Brignall do	Storm King	14½	23	7	17	20	81½
Thos. Turner do		16	24	8	6	19	73
Jno. Hutchison, Dryden		13	23	7	12	15	70
Robt. M. Skene, Oxdrift		14½	24	7	9	14	68½
Alex. Skene, Dryden		11	23	7	8	15	64
Peter Reid, Dryden		9	23	9	10	11	62
Six Nations Agr. Society. *Judge—C. R. Gies.*							
Chancy Garlow, Newport	Salzer's National	17	23½	9	18	22	89½
David Fish, Newport		17	23	9	18	22	89
A. Russel, Hagersville	Mammoth Cluster	16	22	6	19	21	84
Chas. Davis, Ohswekin	Prince Royal	15½	18	9	19	22	83½
Wm. Smith, Sr., Burtch	Salzer's National	15	23	8	17	20	83
Ezekiel Newhouse, Newport	Quaker	15½	21	9	16	21	82½
Xavier Decaire, Newport	Salzer's National	16	18	8	18	21	81
Hardy Miller, Ohswekin	White Sensation	15	20	8	18	19	80
Fred Martin, Newport	Quaker	15	20	9	15	20½	79½
Wm. Captain, Ohswekin	Silver Mine	18	10	9	18	22	77
Geo. P. Hill, Ohswekin	Banner	12½	15	9	18	20½	75
Onondaga Agr. Society. *Judge—C. R. Gies.*							
A. W. Van Sickle, Onondaga	Siberian	18½	24	9	17	23½	92
A. W. Hamilton, Cainsville	do	18	24	9	17	23	91
W. H. Hird, Onondaga	American Banner	18	24	8½	17	23	90½
Jno. McIrving, Cainsville	Improved do	17½	23	7	19	23	89½
Wm. Simpson, Onondaga	Sensation	17½	22½	8½	19	21	88½
C. W. Burrill do	do	17	22	8½	18	21½	87
R. J. Robertson do	Banner	16½	23	8	17	22	86½
M. N. Simpson do	Sensation	16	23	8	19	18	84
W. W. Hunter do	Russian	17½	17	8	17	22	81½
Thos. Thompson do	Joanette	16	19	9	15	22	81
Francis Thompson, Cainsville	do	16½	17	9	16	22	80½
J. H. Hamilton do	Newmarket	15½	17	8	17	22	79½
Chas. Edwards, Onondaga	Joanette	14½	15	8½	16	20½	74½
Eastnor Agr. Society. *Judge—J. F. Metcalfe.*							
Jas. Sholdice, Spry	Ligowa	17½	23	8	19½	23½	91½
Wm. Bray, Jr., Lion's Head	Siberian	19	23½	6½	15	23½	87½
Wm. Warder, Spry	Ligowa	16	23½	6	19	22	86½
Geo. Hawes, Spry	Tartar King	15½	24	7	15	22	83½
Jas. A. Spiers, Lion's Head	do	16	22	7	19	21½	82½
J. H. Cook do	Impr'v'd American	18	18	7	15	23½	81½
Wm. Bray, Sr., Spry	Scottish Chief	17	20	5	17	21	80

*General appearance—Considering stand of crop, type of plant, vigor and uniformity of growth, acreage, method of seeding, absence of lodging.

†Yield and quality—Considering proportion of well-filled heads of plump grain of good quality, and uniformity of maturity.

RESULTS OF COMPETITIONS IN STANDING FIELD CROPS.—*Con.*

OATS.

Competitors in Order of Merit.	Name of Variety.	General appearance.	Freedom from weeds.	Freedom from smut, rust, blight and insects.	Freedom from other varieties and other kinds of grain.	Apparent yield and quality of grain.	Totals of scores.
EASTNOR AGR. SOCIETY—*Con.* *Judge—F. J. Metcalfe.*		Max. score 20	Max. score 25	Max. score 10	Max. score 20	Max. score 25	Max. scr. 100
Jas. Nicholas, Lion's Head	Ligowa	14½	20	6	18	21	79½
Eli Warder do	Storm King	14	20	8	18	19	79
Wm. Stewart do	Garton's Abund'ce	15½	15	7	18	22	77½
Ronald Cameron, Spry	Sheffield Standard.	12	21	5	18	21	77
D. A. Brown, Lion's Head	do	13	20	7	16	20	76
Abe Mielhausen do	Irish White	17	20	.....	17	21	75
R. Tackaberry do	Siberian	15½	19	.....	18	20	72½
Hy. Stewart do	Impr'v'd American	11½	24	4	19	13	71½
B. H. Morton, Barrow Bay	Storm King	13½	15	7	10	22	67½
Jno. Slack, Hope Bay	20th Century	14½	15	5	13	13½	61
Robt. Lamont, Barrow Bay	Irish White	13½	.....	5	15	14½	48
LUCKNOW AGR. SOCIETY. *Judge—Jno. Campbell.*							
Jas. Baird, Lucknow	Sensation	19	22	9	18	19	87
Rod. McKenzie, Lucknow	White Danish	17	24	8	19	17	85
Jno. McLeod do	do	16	23	8	20	16	83
Jno. McDiarmid do	do	16	22	9	20	15	82
Geo. A. Greer, Jr. do	Sensation	17	16	9	15	19	76
Mrs. Watson do	20th Century	16	22	7	13	17	75
McKay Bros. do	New Century	15	18	7	18	14	72
W Wilson do	Sensation	13	25	8	18	6	70
Alex. McDiarmid do	Waverley	14	20	7	15	13	69
J. J. Taylor do	New Century	18	19	9	8	14	68
Con. Gaynor do	Storm King	14	20	7	13	14	68
Albert Alton, Belfast	Thousand Dollar	14½	16	8	15	14	67½
Alex. Thompson, Clover Valley	Siberian	15	20	8	9	15	67
Smith Bros. do	Abundance	12½	20	6	15	12	65½
Jas. Alton, Belfast	Mortgage Lifter	14	15	8	15	13	65
McDonald Bros., St. Helens	Irish White	13	18	8	12	13	64
CARLETON CO. AGR. SOCIETY. *Judge—E. D. Eddy.*							
A. H. Acres, Hazledean	Banner	17	23	9	19	23	91
A. H. Foster, Twin Elm	Rosedale	17	22	6	17½	22½	85
A. C. Lackey, Stanley's Corners	.....	16½	18	8	19	21	82½
Geo. Boyce, Merivale	Banner	12½	24	8	19	17	80½
R. Richardson, South March	Sensation	16½	15	4	18½	22	76
W. A. Wallace, Kars	Rosedale	15	11	8	16	21½	71½
Jas. Boyd, Stittsville	Banner	14½	8	9½	19	20	71
Wesley Brownlee, North Gower	do	14½	12	7	15	21	69½
Jno. Nesbitt, Fallowfield	do	13½	18	6½	10	20	68
SOUTH DORCHESTER AGR. SOCIETY. *Judge—T. H. Mason.*							
D. Clapton, Brownsville	Ligowa	17	22	9	18	16½	82½
Simon Charlton, Springfield	Storm King	17	22	8	18	16½	81½
J. A. Moore, Mapleton	Banner	17	21	8	16	17¾	79¾
C. W. Charlton, Springfield	White Siberian	17	20	7½	19	16	79½
W. B. Martin, do	Banner	16	22	8	18	15	79
Sylvester Charlton, do	Storm King	16½	20	8	18	16	78
J. A. Charlton, do	White Siberian	15½	22	7½	18	15	78
Jas. Smith, do	White	17	20	7	18	14	76
Jesse Shievely, do	Irish Victor	15½	21	7	16	14	73

RESULTS OF COMPETITIONS IN STANDING FIELD CROPS.—*Con.*

OATS.

Competitors in Order of Merit.	Name of variety.	General appearance.	Freedom from weeds.	Freedom from smut, rust, blight and insects.	Freedom from other varieties and other kinds of grain.	Apparent yield and quality of grain.	Totals of scores.
S. Dorchester Agr. Soc.—*Con.* *Judge—T. H. Mason.*		Max. score 20	Max. score 25	Max. score 10	Max. score 20	Max. score 25	Max. scr. 100
D. E. Shievely, Springfield	Irish Prize White.	15½	19	7	18	14	73½
J. Arthur Baker do	White Siberian	15½	20	7	15	14	71½
Sam. Dawes, do	White Champion	15	20	8	15	12	70
Kenyon Agr. Society. *Judge— T. G. Raynor.*							
A. T. Bennett, Athol	Banner	18	24	7½	19	22	90½
J. J. Campbell, do	do	16½	24	8	19	22	89½
G. Bourgeon, St. Isidore	Small White	18	24	7½	15	21½	86
J. W. Kennedy, Apple Hill	Banner	17	23	7	16	21	84
D. J. Campbell, Maxville	do	18½	24	9	4	23	78½
H. and G. Bennett, Sandringham	do	15	20	6	15	22	78
Jos. Legault, St. Isidore		15½	20	8	15	19	77½
F. S. Campbell, Dominionville		14	22	6	14	19	75
Peter A. McNaughton, do		14½	23	6	13	18	74½
J. B. Barrett, Athol	Banner	16	23	7	4	19	69
Douglas McColl, Maxville		11½	21	8	12	13½	66
R. Hunter, Sr., do	Newmarket	16	10	6	12	21	65
D. A. Campbell, Dominionville		11	22	6	12	13	64
Emedy Lamoine, St. Isidore		14	16	7	9	17	63
Albert Barrett, Athol	Banner	13	22	6	5	16	62
R. R. Hunter, Jr., Maxville	Newmarket	15	5	7	14	18	59
Collingwood Tp. Agr. Society. *Judge—J. F. Metcalfe.*							
Foster Bros., Clarksburg	Banner	19	21	8	19	23½	90½
Elisha Parkinson, Thornbury	White Snowdrop	17	22	6	18	23	86
Clifford Lougheed, Clarksburg	Banner	18	17	9	19	22	85
Thos. McMurchy, Loree	New Sensation	16	20	9	18	21	84
Robert Conn, Heathcote	Banner	15	24	6	18	20	83
Amos Kentner, Clarksburg	do	15½	20	8½	18	20	82
J. H. Irwin, do	Snowdrop	18	13	9	19	22	81
Chas. Parkinson, Thornbury	do	15½	23	6	18	18	80½
Alex. McGowan, Ravenna		13	18	8	18	18	75
M. Mahoney, Heathcote	Snowball	14	15	9	18	18½	74½
W. H. Matthews, Clarksburg	Banner	13	12	9½	19	19	72½
Armstrong Bros., Ravenna	20th Century	15	19	7½	10	20½	72
Thos. H. Carefoot, Redwing	Tartar King	16½	15	.....	17	21	69½
W. L. Goldsmith, Clarksburg	Banner	16½	.....	9	18	20½	64
Sam. W. Guy, do	do	15½	.....	9½	18	20	63
J. A. Jarrett, do	do	13½	.....	7	18	19½	58
Wm. Parks, Heathcote	Pride of Scotland.	12½	.....	8	15	18½	54
Keppel Agr. Society. *Judge—J. F. Metcalfe.*							
Geo. Crampton, Kemble	Banner	19	24½	.....	18	22½	84
Douglas Davidson, do	Sensation	13	23	8	17	17½	78½
Chas. Johnston, do	20th Century	16	23	.....	18	20½	77½
Daniel Davidson, do	do	17½	15	5	18	19½	75
Thos. Johnston, do	do	16½	17	.....	18	21½	73
Jno. McGregor, do	Silver Mine	14½	18	2	18	18	70½
Wm. McGregor, do	20th Century	15	10	6	17	19½	67½
J. E. Johnston, do	do	13	10	6	16	16½	61½
Colin Mooney, North Keppel	Sensation	10½	10	5	18	11	54½
Thos. Howell, Kemble	20th Century	7½	17	.....	18	11	53½

RESULTS OF COMPETITIONS IN STANDING FIELD CROPS.—*Con.*

OATS.

Competitors in Order of Merit.	Name of variety.	General appearance.	Freedom from weeds.	Freedom from smut, rust, blight and insects.	Freedom from other varieties and other kind of grain.	Apparent yield and quality of grain.	Totals of scores.
SOUTH GREY AGR. SOCIETY. *Judge—Hy. Glendenning.*		Max. score 20	Max. score 25	Max. score 10	Max. score 20	Max. score 25	Max. scr 100
D. Edge, Edge Hill	White American	15½	24	8	19	20½	87
J. & J. Hunter, Durham	Thousand Dollar	17⅞	24	6	17½	21	86
Geo. Binnie, Bunessan	White Jewel	15	24	7⅞	18	21	85½
Colin Blyth, Orchard	Scottish Chief	15½	23	6½	18	22	85
W. G. Firth, Edge Hill	Impr'v'd American	15	23	7½	18	21	84½
Robt. Edge, Edge Hill	Sheffield Standard.	15	22	8	17	22	84
David Hamilton, Durham	Banner	14½	24	6	17	21	82½
T. W. Scarf, Rocky Saugeen		14	20	8	18	22	82
H. D. Hunt, Vickers	Prince Royal	13⅜	19	8	19	22	81⅛
Wm. Richie, Edge Hill	Mammoth Cluster.	14	23½	6	16	22	81½
Wm. W. Ramage, Thistle	Tartar King	14⅛	24	6½	15½	19	79⅛
Wm. Scarf, Durham	Scottish Chief	13⅜	23	6	18	17½	78
R. Brigham, Allan Park		14⅛	19	7	17	19½	77
R. Barber, Varney	Canadian Pride	14½	14	7	17	21	73½
WALTERS FALLS AGR. SOCIETY. *Judge—J. F. Metcalfe.*							
Jas. Bowes, Strathnairn	Early Lincoln	18	24	8	18	21½	89½
W. G. Wilson, Goring	Sheffield Standard.	17	23	9	17	22½	88½
W. J. Seabrook, Walter's Falls	Cave White	14½	24½	7	19	22	87
Thos. G. Quinton, do	do	17	22	6	16	22	83
Jas. A. Hammill, do	Siberian	14½	23	8	19	17	81½
Fred Lemon, do	Sensation	15½	20	9	18	18	80½
Jas. Lemon, do	White Jewel	13	22	9	16	20	80
Alfred Ward, do	Cave white	14⅛	18	7	19	21	79½
R. W. Quinton, do	White Jewel	14½	15	9	16	21	75½
Jno. Sutherland, do	Siberian	14	23	7	10	20½	74½
Sam. Marshall, do	White Jewel	14½	18	8½	10	21½	72½
Robt. D. Bowes, Elmhedge	Dodd's White	17	7	5	18	22	69
J. J. Norton, Walter's Falls	Banner	15½	10	7	15	20	67½
Hugh Rennie do	20th Century	15	.....	9½	17	21	62½
Robt. Ptolemy, do	Sheffield Standard.	14	.....	9	18	21	62
David Craig, Elmhedge	20th Century	10	5	7	18	20	60
W. H. Free, Strathnairn	Prince Royal	12½	.....	6	16	23	57½
Jno. J. Seabrook, Walter's Falls.	20th Century	13	.....	4	18	15	50
CALEDONIA AGR. SOCIETY. *Judge—J. M. McCallum.*							
Jas. Douglas, Caledonia	Banner	19	21	9	18½	22½	90
Wm. Gringer, do	Siberian	18½	23½	9	18	20½	89½
J. B. Calder, Carluke	do	18⅜	24	7⅛	17½	21	88⅜
Edward Gringer, North Seneca	do	18⅜	21	9	18	20½	87
Alex. Cowie, Caledonia	Sensation	17⅜	24	8	17 ½	19½	86½
D. Hamilton, Renforth	Silver Mine	17½	24	7½	17	19½	85½
Leonard Park, North Seneca	Banner	16½	22	8	18	19	83½
F. G. Gringer, Caledonia	Silver Mine	18	20	8½	16	20½	83
M. Richardson & Son, Caledonia.	Siberian	17½	20	8½	17	20	83
Jno. T. Lee, Caledonia	Banner	17	23	8½	16	17	81½
N. H. Wickett, York	Tartar King	17½	18	8	16	20½	80
Robt. Thompson, Caledonia	Silver Mine	16½	19	8½	15	19½	78½

RESULTS OF COMPETITIONS IN STANDING FIELD CROPS.—*Con.*

OATS.

Competitors in Order of Merit.	Name of variety.	General appearance.	Freedom from weeds.	Freedom from smut, rust, blight and insects.	Freedom from other varieties and other kinds of grain.	Apparent yield and quality of grain	Totals of scores.
EAST HURON AGR. SOCIETY. *Judge—Jno. Campbell.*		Max. score 20	Max. score 25	Max. score 10	Max. score 20	Max. score 25	Max. scr. 100
Thos. R. Bennett, Wroxeter	White Jewel	18	20	8	18	19	83
Jas. Speir, Brussels	Banner	17	21	8	17	19	82
Donald Robertson, Brussels	Thousand Dollar	17	22	8	16	18	81
Jas. Shurrie, Brussels	From German Seed	17	20	8	18	17	80
Robt. L. McDonald, Brussels	Marvel	16	23	7	15	18	79
Robt. Nichol, Brussels	Scottish Chief	17	16	8	18	19	78
David Milne, Ethel		16	18	7	17	18	76
Jno. Broadfoot & Son, Brussels	Siberian	18	7	9	18	23	75
Miller Bros., Brussels	New Century	17	13	9	14	20	73
W. J. Hemmingway, Brussels	Sensation	17	13	8	15	19	72
O. Turnbull, Walton	Sheffield Standard	15½	14½	9	15	17	71
Alext McLauchlin, Brussels		14	17	8	13	18	70
Eli Smith, do	New Century	13	15	9	15	17	69
W. Armstrong, do	Thousand Dollar	15	13	8	14	16	66
WALLACEBURG AGR. SOCIETY. *Judge—T. H. Mason.*							
Crowe Bros., Wallaceburg	Banner	18½	23	9	18	18½	86½
Jno. Coveny, Baldoon	Irish	18	21	9	19	17½	84½
Chas. Harret, Wallaceburg	New Century	18½	20	8½	18	18½	83½
Geo. L. Mickle, do	White Nation	18	21	8	18	17	82
J. E. Richardson, do	Banner	18	20	7½	18	17½	81
Alex. Gordon, Oldfield	do	16½	21	9	18	16	80½
Geo. Crawford, do	do	16½	21	8	19	15	79½
W. A. Stover, do	Sensation	17	21	8	18	14	78
Langstaff Bros. do	New Sensation	16	21	7	18	15	77
Frank Brabant, Wallaceburg	Storm King	15½	18	7	16	15	71½
W. Burgess & Son do	Black Arnold	16	18	7	16	14	71
SOUTH LANARK AGR. SOCIETY. *Judge—E. D. Eddy.*							
J. L. Wilson, McGarry	Banner	18½	23	3	19½	23	87
P. S. McLaren, McGarry	White Jewel	15½	22	8½	18	20½	84½
Sam Wilson, Scotch Line		16	20	6	18½	20½	81
Geo. Oliver, Perth		16	18	7	17	21½	79½
J. N. Warren, Balderson		17	13	7	16	21	74
Jas. Taylor, Jr., Perth		15	19	4½	15	20	73½
Thos. Lee, Elliott		14	23	5	17	14	73
H. Frayne, Perth		17	20	.....	16	19	72
J. Armour, Jr., Perth		12½	20	4	18	17	71½
T. A. Poole, Perth		14	16	6	17	17½	70½
Wm. Stiller, Elliott		13½	22	3	18	13	69½
Daniel Walsh, Drummond	Banner	13½	16	4	15	18½	67
R. E. Wilson, Scotch Line	New Century	12½	18	3	19	14	66½
Wm. McVitty, Perth		14½	15	.....	15	19	63½
R. E. White, Balderson	Banner	14	15	.....	14	14	57
Wm. A. Ryan, Perth	Sheffield Standard & Banner mixed.	12½	15	4½	8	16	56
PENINSULAR CENTRAL AGR. SOC'Y. *Judge—J. M. McCallum.*							
J. A. Laird, Beamsville	Siberian	18½	23	9	18	22	90½
Ira N. Wardell, Smithville	Ligowa	17½	24	8	18	20½	88
Jno. A. Book, do	Tartar King	18	21	8	17	23	87

RESULTS OF COMPETITIONS IN STANDING FIELD CROPS.—*Con.*

OATS.

Competitors in Order of Merit.	Name of variety.	General appearance.	Freedom from weeds.	Freedom from smut, rust, blight and insects.	Freedom from other varieties and other kinds of grain.	Apparent yield and quality of grain.	Totals of scores.
PENINSULAR CEN. AGR. SOC.—*Con.* *Judge J. M. McCallum.*		Max. score 20	Max. score 25	Max. score 10	Max. score 20	Max. score 25	Max. scr. 100
Elijah Durham, Smithville	Mortgage Lifter	17	23½	7½	18	20	86
L. Martin, Tintern	20th Century	17	23½	8	17½	19½	85½
Chas. H. Senske, Smithville	Silver Mine	16½	24	8	18	18½	85
Moses Haist, Tintern	Danish	16½	23	8	18	19	84½
Robert E. Book, Smithville	Silver Mine	16½	24	8½	15	20	84
Arthur C. Irvine, Kimbo		16½	23	7½	19	17	83
J. W. Cartwright, Smithville	Banner	15½	21	8½	16	18¼	79½
Wm. E. Field, do		15½	23	8½	14	17	78
NORTH MIDDLESEX AGR. SOCIETY. *Judge—T. H. Mason.*							
Thos. Hindmarsh, Ailsa Craig	Banner	17	23	8	18	16½	82½
F. G. Hughes Bros., Falkirk	The Wyatt	17	22	7½	18	17½	82
C. Bean, Brinsley	White Siberian	16½	22	8	18	17	81½
Ross Bros., Nairn	American Banner.	16½	21	8	19	16½	81
D. Robinson, Ailsa Craig	The Czar	16	20	8	18	17½	79½
J. J. McNaughton, Nairn	Haskett	16½	19	9	18	16	78½
D. McArthur, Ailsa Craig	Banner	16	20	9	18	15½	78½
R. R. Cameron, do	Haskett	15½	20	7½	17	16½	76½
Neil McAlpine, do	Irish White	16½	20	8	16	15	75½
A. Hotson, do	Ligowa	16	20	7	16	16	75
J. D. McEwen, Falkirk	White Jewel	18	15	8	18	15	74
J. McFarlane, Falkirk	Can. King	15	18	7	18	13	71
Wm. Veitch, Ailsa Craig	Mortgage Lifter	15	18	8	17	12½	70½
Jno. Carson, do	Tartar King	15	20	7	15	13	70
Wm. Stewart, Nairn	Wide Awake & Tartar King mixed	15	15	8	10	14	62
SOUTH MUSKOKA AGR. SOCIETY. *Judge—F. A. Clowes*							
Herman Goltz, Bardsville	Imported Scotch	18¼	22	8	18	23	90¼
A. Barron, Bracebridge	American Banner.	17¾	22	9	18	22½	88¼
Geo. Yearley, Falkenburg	Siberian	16½	22	8½	18	22	87
S. Stephens, Alport	Siberian	16½	19	9	14	22½	81
Jos. Nicholson, Bracebridge	New Century	15	20	8	16	21	80
W. Dennis, Bracebridge	Danish White	11	21	9	19	20	80
J. J. Beaumont, Bracebridge	Siberian	15	20	8	14	22¾	79¾
Sax Moore, Falkenburg	Sensation	16	21	9	10	22	78
Jas. Kaye, Bracebridge		13½	15	9½	18	21½	77½
T. Hammill, Falkenburg	Storm King	13½	22	7½	13½	21	77½
WOOLER AGR. SOCIETY. *Judge—A. Forster.*							
R. McMurter, Frankford	White Irish Victor	18½	23½	10	18½	22½	93
C. R. Terrill, Wooler	American Banner.	17½	23	9½	18	20½	88¼
P. J. Moran, do	20th Century	15½	23½	8½	17	21	85½
Dan. McColl, do	American Banner.	17	23	9	16	19	84
W. Adams, do	Improved Ligowa.	16½	24	9½	13½	20	83½
E. M. Wessels, do	Dodd's White	17	21	10	13	21	82
J. A. Dunn, do	Danish White	16½	22	7½	17	18	81
J. S. J. McColl, do	Improved Ligowa.	16	18	9	17	20	80
R. H. Cole & Sons, Wooler	Black Tartarian	14	20	9	15	20	78
H. Wessels, Wooler	Ligowa	14	16	10	19	18	77

RESULTS OF COMPETITIONS IN STANDING FIELD CROPS.—*Con.*

OATS.

Competitors in Order of Merit.	Name of variety.	General appearance.	Freedom from weeds.	Freedom from smut, rust, blight and insects.	Freedom from other varieties and other kinds of grain.	Apparent yield and quality of grain.	Totals of scores.
McMurrich Agr. Society *Judge—F. A. Clowes.*		Max. score 20	Max. score 25	Max. score 10	Max. score 20	Max. score 25	Max. scr. 100
A. E. Taylor, Starratt	Abundance	17½	24	9	19	21	90½
M. Gilmour, Doe Lake	Banner	18	22	9	18½	22½	90
W. J. Fowler, Sprucedale	Sensation	17½	23	9	18	21½	89
Oliver Johnston, Royston	Waverley	18½	22	7½	18	22	88
Maurice Mole, McMurrich	Irish White	16½	24½	9½	17	19	86½
Cyrus Lawrence, Sprucedale	do	19	18	8½	16	24	85½
Jno. Stewart, McMurrich		17½	24½	8	16	19	85
Edwin Broadway, Sprucedale	White Cave	15½	20	8	19	22½	85
Jas. Downes, do	Silver Mine	14	24	8½	18½	19½	84½
Alex. Marshall, do	Storm King	15½	24½	9	17	18½	84½
Martin Farrell, do	do	16	22	7½	18	20½	84
Wm. Alexander, Doe Lake	50 lbs. Black	16½	20	8	18	21½	84
Chas. Cudmore, Sprucedale	Western	15½	23	8	16	20½	83
Alex. Reid, Haldane Hill	Sensation	15½	24½	8	16	19	83
W. J. Gollinger, Sprucedale	Western	17	21	9	16	19½	82½
S. H. McGaughey, Doe Lake	American Banner	16	18	8½	18	21	81½
Ed. Pearce, Sprucedale		14½	21	9½	16	19½	80½
Geo. Marshall, Haldane	Western	15	20	8½	16	19	78½
Jas. Stewart, McMurrich	do	11½	20	8	16	19	74½
Strong Agr. Society *Judge—F. A. Clowes.*							
Wm. Kemp, Sundridge	Storm King	18	22	9½	19	23	91½
Jas. Prior, do	Irish White	18½	22	9	19	22½	91
F. W. Hannaford, Pevensey	Banner	18¾	23	7	18	22½	89½
W. Vanmeer, Sundridge	Irish White	16½	23	9	18½	22	89
Geo. H. Butson, do	do	18¾	21	9	18	22	88¾
I. C. Cunningham do	Sensation	17	22	8½	18½	22½	88½
Geo. Cottrel, do	Storm King	17¾	24	8	18½	20	88¼
J. L. Anderson, do	Irish White	17¾	20	9	17	23	86¾
Peter Lamb, do	Newmarket	16½	19	9	19	23	86½
E. Christian, do	Black Tartar	16	22	9	18	21	86
J. B. Duke, Hartfell	Storm King	16¼	21	9	18	21	85¼
G. Vanmeer, Sundridge	Anthony	17½	21	7½	18	20½	84½
Wm. Knowles, do		14½	21	8	18	20½	82
J. Paget, do	New Century	15	21	9	16	21	82
A. E. Peters, do	Irish White	15½	21	4	18½	22½	81½
Benj. Rhewbottoim, do	Sensation	15¼	18	7	18	22	80¼
Lewis Yinis, do	do	15½	20	8	15	21	79½
Hy. May, do	Storm King	13½	20	7½	15	20½	76½
G. E. Gibbon, do	Irish White	15	16	7	18	20½	76½
Elma Agr. Society *Judge—Jno. Campbell.*							
Alex. Struthers, Newry	Shetfield Standard	15½	15	9	18	22	79½
And. Robb, do	White English	17	16	9	13	20	75
Wm. Robb, do	Banner	15	20	8	12	19	74
Jno. B. Riach, do	20th Century	16	17	6	15	15½	69½
Alex. Simpson, Atwood	Shetfield Standard	15	14	9	14	17	69
Jas. L. Horn, do	20th Century	14	12½	6	18	16	66½
A. R. Horn, do	Poland	11	12	7	18	16	64
Wm. Morrison, Newry	50 lbs. Black	14	15	5	15	14	63
Jno. S. Cowan, Donegal	Scottish Chief	13	15	5	13	15	61

RESULTS OF COMPETITIONS IN STANDING FIELD CROPS.—*Con.*

OATS.

Competitors in Order of Merit.	Name of variety.	General appearance.	Freedom from weeds.	Freedom from smut, rust, blight and insects.	Freedom from other varieties and other kinds of grain.	Apparent yield and quality of grain.	Table of scores.
SOUTH PERTH AGR. SOCIETY *Judge—T. H. Mason.*		Max. score 20	Max. score 25	Max. score 10	Max. score 20	Max. score 25	Max. scr. 100
M. H. Switzer, Rannoch	White Siberian	18	23	8	17	19½	85½
Robt. Thomson, Avonbank	Daubeny	15½	23	9	17	16	80½
Perry F. Doupe, Kirkton	Sheffield Standard.	15½	22	8	18	15½	79
Adam Oliver, Avonbank	White Marvel	16½	20	7½	18	16½	78½
Jno. Hodge, Anderson	White Poland	16½	18	8	18	17	77½
Michael Brethour, Woodham	Banner	16	20	8	17	16	77
R. S. McCullough, Science Hill	White Jewel	15	22	7	15	18	77
Aurelius Moses, St. Marys	White Marvel	16	21	8	16	15	76
A. & A. Smith, do	Banner	17	20	7	16	15	75
Duncan McIntyre, do	White Siberian	16½	21	7	16	14	74½
Jos. Mountain, Avonbank	White Marvel	16	20	7	17	13½	73½
J. H. McCully, St. Marys	Big Four	16	20	7	16	14	73
EAST PETERBOROUGH AGR. SOCIETY *Judge—D. James.*							
Lawrence Lonergan, Norwood	Tartar King	16	20	9	18	23	86
Ben. C. Parker, do	Irish White	16	20	8	18	21	83
F. Birdsall, Birdsall	White Russian	15	22	9	17	18	81
Andrew Know, Norwood	20th Century	15	20	8	17	18	78
Alf. Robson, do	Ligowa	14	22	8	18	14	76
Jno. Breckinridge, Westwood	Newmarket	15	12	8	15	22	72
Thos. Buck, Norwood	Sensation	13	20	8	14	17	72
Daniel Kelly, do	Irish White	14	17	8	13	18	70
Isaac Puffer, do		13	20	8	15	13	69
Jno. Wright, Havelock	New Derby	12	12	7	15	19	65
Jas. Andrews, Norwood	Russian White	12	7	7	16	18	60
Jno. White, do	White Prolific	15	5	8	8	20	56
Jas. McDonald, do	Siberian	13	7	7	14	14	55
Sargent & Son, Westwood	White Dewdrop	10	17	7	10	10	54
Wm. Breckinridge, Indian River	Banner	12	7	6	14	12	51
OTONABEE AGR. SOCIETY *Judge—D. James.*							
W. Shearer, Lang	20th Century	15	23	9	18	21	86
Peter Drummond, Keene	Irish White	15	22	9	18	20	84
Jno. Miller, Lang	20th Century	16	22	7	18	20	83
Jno. Fife, Lang	Siberian	14	22	8	17	20	81
Fred Speer, Keene	Dodd's White	16	20	8	16	20	80
Mark Plunkett, Keene		15	21	8	14	21	79
Jno. Lang, Jermyn	Banner	14	19	7	15	20	75
Robt. Humphries, Lang		15	23	8	17	12	75
Thos. Thompson, Hiawatha	Banner	13	20	9	15	16	73
Robt. Wier, Lang	Sheffield Standard	13	19	8	17	16	73
Jno. Stark, Lang	Tartar King	15	12	8	18	19	72
R. A. Nelson, Keene	Dodd's White	14	15	7	12	20	68
F. A. Eason, do	20th Century	14	14	8	9	20	65
Alex. Stewart, do	Banner	10	15	8	15	14	62
Joshua Smithson, Graystock	Sheffield Standard.	14	10	4	16	16	60
David Edwards, Keene	Banner	11	18	5	10	12	56
SOUTH MONAGHAN AGR. SOCIETY *Judge—A. Forster.*							
Jno. Buckham, Bensfort	New Century	17	24½	10	19	22½	93
Robt. Fisher do	Prolific	17½	24	9½	18	22½	91½

RESULTS OF COMPETITIONS IN STANDING FIELD CROPS.—*Con.*

OATS.

Competitors in Order of Merit.	Name of variety.	General appearance.	Freedom from weeds.	Freedom from smut, rust, blight and insects.	Freedom from other varieties and other kinds of grain.	Apparent yield and quality of grain.	Totals of scores.
SOUTH MONAGHAN AGR. SOC.—*Con.* *Judge—A. Forster.*		Max. score 20	Max. score 25	Max. score 10	Max. score 20	Max. score 25	Max. scr. 100
C. H. Dawson, Bailieboro	American Banner	16½	24½	9½	18	22	90½
D. H. Morrison, Bensfort	Waverley	17	23	9½	18½	22	90
J. W. Hall do	Sheffield Standard	16	23	9	18½	22	88½
Stirton Bros.	American Banner	16½	22	9	18	22	87½
Peter Dawson, Bailieboro	Ludwig	16	23½	9	17	22	87½
J. C. Campbell, do	Waverley	16	22	8½	18	22½	87
Fred Waterman, do	Sensation	16	22	8½	18	22	86½
H. J. Miller, Lorenz	New White Irish	14½	22	8	18½	21½	84½
T. Huggins, South Monaghan	American Banner	14½	21	10	18	20	83½
ALFRED AGR. SOCIETY *Judge—J. Michaud.*							
Hy. Chamberlain, Alfred	Banner	17	23	9	18	23	90
Napoleon Lalonde do	do	17	20	8	17	21	83
F. X. Cadieux do	Russian	16	21	7	17	19	80
Joseph Beaulieu, Alfred Centre	Banner	16	23	7	14	19	79
Alphonse Presault, Grattan Cor.	do	10	23	5	20	19	77
Menezippe Lauzon, St. Thomas d'Alfred		14	24	8	12	18	76
Louis Tourangean, Alfred		14	15	6	15	18	68
Ferdinand Daoust, do	Waverley	12	15	7	16	16	66
Jos. Cadieux, St. Thomas d'Alfred		15	12	5	15	19	66
Napoleon Lemieux, Grattan Cor.	Banner	10	24	8	7	17	66
Arthur Daoust, Alfred	Waverley	12	12	7	15	14	60
Sam. Parisien, do		10	10	5	15	19	59
Napoleon Lamarche, Alfred		10	13	5	10	19	57
Alex. Tilion, L'Orignal	Banner	12	9	8	10	17	56
Geo. Leguin, Fournier		14	5	4	10	18	51
Alex. Larocque, Alfred	Banner	8	15	5	10	13	51
Alphonse Leduc do	do	10	15	8		12	45
Adolphe Presault, Grattan Cor.		15		5	10	13	43
Edmond Carriere, Ritchance	Banner	10		8	5	19	42
J. Delphis Presault, Grattan Cor.		9	7	2	10	13	41
NORTH RENFREW AGR. SOCIETY *Judge—Simpson Rennie.*							
Osborne Wright, Beachburg	American Banner	17	22	8	15	22	84
Jas. A. Beach, do		14	22	8½	17	15	76½
Robt. Doherty, do	Everett	15	17	9	15	18	74
Wm. Headriek, do	Lincoln	14	19	7	15	17½	72½
Wm. McLellan, Forester's Falls		12	20	9	16	15	72
Jno. J. Condie, Beachburg	Lincoln	11	18	7	17	14	67
Jno. Beauprie, do		11	18	8	16	14	67
Jno. J. McLean, do	Lincoln	13	18	7	14	15	67
Geo. McCaskill, Forester's Falls	American Banner	10	18	8	16	14	66
Jos. Valliant, Beachburg	Newmarket	12	17	7	15	14	65
RENFREW AGR. SOCIETY *Judge—Simpson Rennie.*							
L. Galbraith, Northcote		14	22	9	16	18	79
Johnson Paterson, do	Tartar King	10	20	8	17	12	67
Robt. Leitch, Renfrew	American Banner	9½	19	8	14	12	62½
Jno. Stewart, Woodville	do	9	19	8	14	11	61
Jno. Airth, do	do	12	13	9	11	14	59

RESULTS OF COMPETITIONS IN STANDING FIELD CROPS.—*Con.*

OATS.

Competitors in Order of Merit.	Name of variety.	General appearance.	Freedom from weeds.	Freedom from smut, rust, blight and insects.	Freedom from other varieties and other kinds of grain.	Apparent yield and quality of grain.	Totals of scores.
RENFREW AGR. SOCIETY.—*Con.* *Judge.—Simpson Rennie.*		Max. score 20	Max. score 25	Max. score 10	Max. score 20	Max. score 25	Max. scr. 100
Jas. Francis, Northcote	.....	5	16	7	18	5	51
David Barr, Jr., Renfrew	American Banner.	10	11	8	.....	12	41
ELDON AGR. SOCIETY. *Judge—A. J. Reynolds.*							
A. B. McLeod, Woodville	Sheffield Standard.	18	20	9	19	21½	87½
D. C. Ross, do	Banner	17	23	9	18	18	85
Andrew McKay do	Newmarket	13½	22	9	18	21	83½
W. W. DeGuerre do	Irish White	17½	19	4½	18	22	81
Jno. Vanstone, Hartley	Newmarket	14	22	9	18	17	80
Jno. C. Smith, Lorneville	New Century	14	19	9	19	18	79
A. McMillan, do	Newmarket	15	20	9	16	18	78
Angus McCrimmon, Woodville	Prince Royal	16	17	9	16	18	76
Thos. Russell, do	Danish White	15½	21	6	14	19	75½
R. P. Hill, do	Newmarket	14	23	8	15	15½	75½
A. D. McMillan, Glenarm	Sheffield Standard.	15	21	4	16	19	75
Robt. Bowins, Woodville	Ligowa	17	11	9	14	22	73
Geo. McKague, Cannington	Newmarket	14	16	8	18	16	72
Fred Hancock, Woodville	do	15	18	9	13	17	72
Geo. Oke, do	do	14	16	8	14	17	69
J. P. Campbell, Lorneville	.....	15	15	9	14	16	69
Jas. S. Jordan, Woodville	Irish White	13	16	7	13	18	67
Jno. D. Morrison, Argyle	Newmarket	14	17	3	15	16	65
D. D. Grant, Woodville	20th Century	13	15	7	14	14½	63½
VERULAM AGR. SOCIETY. *Judge—A. J. Reynolds.*							
Wm. Lewis, Dunsford	Siberian	18½	23	9½	19	21	91
Thos. Fairbairn, Bobcaygeon	Sensation	18	23	9	18	20	88
Garfield Kennedy, do	Mammoth Cluster.	17	23	8	17	20½	85½
Jno. J. Robertson, Dunsford	Sensation	17	19	9	18	20½	83½
Robt. T. Robertson, Bobcaygeon.	do	16	21	9	19	18	83
Thos. Robertson, Dunsford	Wide Awake	16	23	7	18	18	82
Ross Kimble, Bobcaygeon	New Century	16	22	8	18	18	82
Jas. M. Justus, do	Irish White	14½	20	8½	19	18½	80½
Thos. Cosh, do	Sheffield Standard.	16	19	7½	18	19	79½
J. McOliver do	Sensation	15	22	8	16	18	79
Campbell Devitt, do	Irish White	15½	18	7	18	19	77½
Wm. Murdoch, Dunsford	Sensation	14½	21	8	18	16	77½
R. E. Thurston, Bobcaygeon	Sheffield Standard.	13½	20	8½	18	17	77
Chas. Thurston, do	20th Century	16	19	7	16	19	77
M. M. Boyd. do	Siberian	15	16	8	18	19	76
Chas. Junkin, do	do	14	21	8	15	18	76
J. J. Devitt, do	Banner	14	18	8	18	18	76
Isaac Lewis, Dunsford	Prince Royal	14½	18	8	19	16	75½
D. Lewis, Bobcaygeon	Siberian	13	22	9	17	14	75
Thos. Ingram, do	Mammoth Cluster.	13	22	6	18	16	75
Jas. Seymour, do	Sheffield Standard.	16	15	6	18	20	75
Fred Warren, do	Surprise	13	20	7	17	14½	71½
CENTRE WELLINGTON AGR. SOCIETY *Judge—B. J. Waters.*							
Jas. A. Lindsay, Fergus	Banner	17½	22½	9	19	18	86
Jno. Barber, Salem	Silver Mine	16	21	9	17	17	80
A. T. Pritchard, do	Irish White	16½	18	9	18	18	79½

RESULTS OF COMPETITIONS IN STANDING FIELD CROPS.—*Con.*

OATS.

Competitors in Order of Merit.	Name of variety.	General appearance.	Freedom from weeds.	Freedom from smut, rust, blight and insects.	Freedom from other varieties and other kinds of grain.	Apparent yield and quality of grain.	Totals of scores.
CEN. WELLINGTON AGR. SOC.—*Con.* *Judge—B. J. Waters.*		Max. score 20	Max. score 25	Max. score 10	Max. score 20	Max. score 25	Max. scr. 100
Wm. J. Deans, Fergus	Newmarket	14½	20	8	19	16	77½
Alfred Farrow, Speedside	Sensation	14	19	7½	18	16½	75
Jas. Stewart, Salem	Silver Mine	15	11	9	16½	17½	69
Jas. Green, Fergus	New Century	13½	13	8	18	13½	66
Geo. A. Wallace, Ponsonby	Newmarket	15½	9	8	15	17½	65
PUSLINCH AGR. SOCIETY. *Judge—B. J. Waters.*							
Jno. A. Cockburn, Aberfoyle	Lincoln	18	23½	9	19½	19	89
Jno. W. Kerr, Morriston	do	16½	23	9	19½	19½	87½
Chas. Currie, do	Sensation	15½	22	9½	19	21	87
Hector McCaig, Aberfoyle	Garry	16½	22½	8½	19	20	86½
Wm. R. Mason, do	White Jewel	16	20	8	20	17½	81½
Wm. Winer, Morriston	Early White Jewel	16½	23	8	9	22	78½
Jno. Clair, Guelph	Lincoln	13	23½	9	19	13	77½
Jno. Penrice, Morriston	do	14½	20	8	17½	14½	74½
Roy D. Leslie, Aberfoyle	Sensation	13½	23	8	15	13½	73
Geo. Lewis, Puslinch	Irish Victor	13	20	7	18	14	72
Alex. McLean, Morriston	Banner	15½	16	8	14	18	71½
H. W. Ironsides, Puslinch	Mammoth Cluster.	13½	9	5	18	16	61½
MT. FOREST AGR. SOCIETY. *Judge—Hy. Glendinning.*							
D. Murphy, Mt. Forest	Banner	17½	24	5½	19	21	87
W. J. Wallace, do	White Russian	18	22	7	18	21½	86½
Chester Nicholson, do	Banner	17	24	6½	19	19½	86
Thos. Grills, Harriston	Ligowa	17	22½	5½	17½	21	83½
Frank Rusnell, Cedarville	Banner	16½	22	5½	18	21	83
Thos. Anderson, Mt. Forest		16	23	4½	18½	19½	81½
Alex. Davidson, Harriston	Sheffield Standard.	15½	23	6	15	21	80½
Alf. Hutchinson, Mt. Forest	Tartar King	14	22	6½	18½	19	80
Hy. Nicholson, do	Banner	16½	16	6½	17½	20½	77
Alf. Caulfield, do	Scottish Chief	15½	17	5	18	20½	76
M. Manion, Egerton		15	19	5½	17	19	75½
J. A. Ross, Cotswold		14	22	5½	15	19	75½
Jos. Williamson, Mt. Forest	Tartar King	15	22	4	14	19½	74½
SCARBORO AGR. SOCIETY. *Judge—Andrew Elliott.*							
B. F. Law, Coleman	White Cluster	18	24	8	19	22	91
R. M. Loveless, Agincourt		16	23	8	19	21	87
Geo. Fitzpatrick, Wexford	Banner	15	23	7	19	21	85
Robt. McCowan, Ellesmere	White Cluster	16	22	7	18	21	84
Alf. Woods, Agincourt		15½	23	6	19	20	83½
W. A. Patterson, Agincourt	Banner	16	20	7	18	22	83
Jno. Kennedy do	do	16	22	5	19	20	82
W. G. Rennie, Ellesmere	Lincoln	14	22	6	19	19	80
T. A. Patterson do	White Cluster	14	22	6	17	19	78
R. B. Ormerod, Brown's Cors.	Stirling	12	22	8	18	19	79
Robt. Martin, Wexford	Banner	15	23	4	18	18	78
Chas. Mason, Ellesmere	Sensation	13	22	8	18	17	78
Lyman Kennedy, Agincourt	Banner	14	22	7	18	17	78
J. W. Cowie, Markham	20th Century	12½	19	7	19	20	77½

RESULTS OF COMPETITIONS IN STANDING FIELD CROPS.—*Con.*

OATS.

Competitors in Order of Merit.	Name of variety.	General appearance.	Freedom from weeds.	Freedom from smut, rust, blight and insects.	Freedom from other varieties and other kinds of grain.	Apparent yield and quality of grain.	Totals of scores.
SCARBORO AGR. SOCIETY.—*Con.* *Judge—Andrew Elliott.*		Max. score 20	Max. score 25	Max. score 10	Max. score 20	Max. score 25	Max. scr. 100
E. A. Mason, O'Sullivan's Cors..	.....	12½	19	8	19	19	77½
Wm. Green, Ellesmere.....	.....	14	20	8	16	19	77
Jno. J. Weir, Malvern.....	.....	10	23	8	18	18	77
A. J. Patterson, Ellesmere.....	20th Century	12	21	6	18	19	76
R. W. Thomson do	Sensation.....	13	22	7	17	17	76
G. B. Little, Brown's Cors.....	20th Century	10	23	8	18	17	76
Hugh K. Clark, Agincourt	Bumper King.....	15	19	4	18	19	75
Wm. Sterling, Brown's Cors.....	Waverley.....	11	22	7	17	17½	74½
Wm. Spencer, Agincourt.....	.....	11	21	7	17	16	72
RICHMOND HILL AGR. SOCIETY. *Judge—Andrew Elliott.*							
Wm. Palmer, Richmond Hill....	Banner	17	21	7	18	21	84
Jas. McLean do	Irish White.....	15	22	8	18	19	82
W. H. Clubine, Thornhill	Early Bohemian ..	14	21	8	17	20	80
Jos. Graham, Carrville.....	Prince Royal	13	20	8	19	19	79
Fred. Clark, Headford.....	Newmarket.....	12	21	6	17	20	76
Jacob Lunan, Victoria Square....	Irish White	13	20	7	18	18	76
Matthew Boyle, Richmond Hill..	Prince Royal	12	18	6	18	19	73
Isaac Crosby do ..	20th Century	14	15	8	16	20	73
Wm. Hart, Jefferson.....	Ligowa..... ...	14	22	6	12	18	72
Jno. Boyle, Richmond Hill.....	Storm King	13	23	6	10	20	72
Geo. Redditt do	Irish White	14	12	8	19	16	69
J. S. McNair, Elgin Mills.....	Storm King	13	19	7	12	18	69

BARLEY.

CARTWRIGHT AGR. SOCIETY. *Judge—Simpson Rennie.*							
Melville Trewin, Blackstock	Mandscheuri	16	20	9	18	19	82
Hy. Mountjoy do	Silver King	14	21	9½	16	15	75½
Jas. Malcolm, Nestleton	.....	13	18	8½	18	15	72½
David Malcolm do	.....	15	16	7½	15	18	71½
Fred W. Taylor, Blackstock	.....	15	18	9	13	16	71
J. J. Parr do	Mandscheuri	15	16	9	12	16	68
Jno. J. Jobb do	.....	14	16	8	15	13	66
Leslie Mountjoy do	Silver King	14	16	9	14	13	66
Norman Taylor do	Mandscheuri	13	14	8	14	15	64
Wm. H. Parr do	.....	12	13	8	16	13	62
SOUTH VICTORIA AGR. SOCIETY. *Judge—Simpson Rennie.*							
Jno. Campbell, Woodville	Mandscheuri	16	24	9½	19	22	90½
H. Graham, Lindsay.....	.....	15	23	9	16	18	81
Wm. Channon, Oakwood	Mandscheuri	17	18	8½	16	20	79½
Jno. Frain do	do	16	15	8½	18	19	76½
Warwick Roddy, Cambray	do	16	15	9½	13	22	75½
T. H. Waldon, Lindsay	do	16	14	9	14	19	72
R. Greenaway, Cambray	do	16	18	9	10	18	71
Hogg & Lyttle, Oakwood.....	do	12	15	9	18	15	69
Thos. H. Reeds, Reaboro	.....	14	18	7	15	14	68
Thos. Deyell, Mt. Horeb.....	Mandscheuri	14	15	7	16	15	67
Peter Hawkins, Reaboro	do	12	13	7	18	14	64

RESULTS OF COMPETITIONS IN STANDING FIELD CROPS.—*Con*

BARLEY.

Competitors in Order of Merit.	Name of variety.	General appearance.	Freedom from weeds.	Freedom from smut, rust, blight and insects.	Freedom from other varieties and other kinds of grain.	Apparent yield and quality of grain.	Totals of scores.
ANCASTER AGR. SOCIETY. *Judge—Simpson Rennie.*		Max. score 20	Max. score 25	Max. score 10	Max. score 20	Max score 25	Max. scr. 100
R. F. Duncan, Carluke		16	23	9	19½	21	88½
Leonard Back, Ancaster		16½	23	9	17	20	85½
Wm. Kern & Son, do		14	24	9½	19	17	83½
Fred Hostein, do		16	20	9	19	19	83
Dan. Hamilton, Renforth		16	18½	9	18	19	80½
Ed. Lyons, Ancaster		14	22	9	18	17	80
Sam. J. Scott, do		15	13	9	19	20	76
J.S.McConachie,do		13	18	8½	19	15	73½
R. S. Stevenson, do		12	20	9	18	14	73
R. C. Brown, do		13	15	8	17	18	71
McNivens Bros., do		14	15	9½	14	14	66½
Jas. Henderson, jr., Ancaster		11	10	9	10	12	52

CORN.

Competitors in Order of Merit.	Name of variety.	General appearance.*	Freedom from smut and insects.	Method and thoroughness of cultivation.	Purity of variety, freedom from effect of cross-fertilization.	Apparent yield of fodder and grain.†	Totals of scores.
ESSEX CO. AGR. SOCIETY. *Judge—Garnet T. Thomson.*		Max. score 20	Max score 5	Max. score 20	Max. score 15	Max. score 40	Max. scr. 100
Robt. Shuel, Paquette	White Cap	16	4	18	13	34	85
Jas. Pierce, Essex	Yellow Dent	17	4	17	12	34	84
Jas. A. Hicks, do	White Cap	17	4	16	13	33	83
J. E. Moore, Cottam	Yellow Dent	15½	4	18	13	32	82½
Thos. Phillips, Essex	Small White Cap	16	4	18	13	31	82
Arthur Wilson, do	do	16	4	14	14	31	79
A. E. Wismer, do	do	15	4	16	13	30	78
T. W. Elford, Elford	White Cap	16	4	15	11	32	78
Andrew Chapman,do	do	16	4	16	12	29	77
W. D. Beattie, Essex	do	14	4	14	14	30	76
Geo. Church, do	do	14	4	15	13	29	75
Thos. McBeath, Elford	Yellow Dent	14	4	15	12	29	74
Victor A. Brown, South Woodslee	White Cap	12½	4	13	13	27	69½
G. G. Gould, Edgar Mills	do	12	4	11	12	28	67
Lewis Hyland, Essex	do	13	4	10	13	26	66
WEST KENT AGR. SOCIETY. *Judge—T. H. Mason.*							
J. H. Simonton, Chatham	White Dent	19½	4½	19½	14	38	95½
Alex. Dick, Harwich	do	18½	4½	19	14	36	92
G. E. Lawrie, Chatham	Yellow Dent	18¾	4½	18	13	36	90¼
David Barr, do	White Dent	18	4	19	13½	35½	90
Jno. Bagnell, do	do	18	4½	17	13½	36½	89½
Wm. Brown, do	Huron Dent	18½	4½	18½	13	34½	89
Adolphus Ball, Van Horn	Yellow Dent	18½	4½	19	13½	33½	89

* Considering per cent. and uniformity of growth, acreage and method of planting.

† Considering quantity and quality of fodder; type as regards size and shape of ear; yield of ears, per cent. of barren and nubbin producing plants; state and uniformity of maturity of ear; size and depth of kernels for the kind.

RESULTS OF COMPETITIONS IN STANDING FIELD CROPS.—*Con.*

CORN.

Competitors in order of Merit.	Name of variety.	General appearance.	Freedom from smut and insects.	Method and thoroughness of cultivation.	Purity of variety, freedom from effect of cross-fertilization.	Apparent yield of fodder and grain.	Totals of scores.
West Kent Agr. Soc.—*Con.*		Max. score 20	Max. score 5	Max. score 20	Max. score 15	Max score 40	Max. scr. 100
Frank Suitor, Chatham	Yellow Dent	18½	4½	18	13	31½	88½
Chas. Stewart, Northwood	White Dent	17½	4½	19	13	34	88
Jas. Ferguson, North Buxton	do	18½	4½	18	13	34	88
J. R. Longmore, Chatham		18	4½	18	13	34	87½
Geo. W. Brown, do	Early Huron Dent.	18½	4	18	13	34	87½
Wm. Harwood, do	Yellow Dent	18	4	16	14	35	87
J. B. Rhodes, do	Pride of the North.	18	4	18	15	32	87
Jos. Capman, do	Huron Dent	16	4½	18	14	34	86½
R. F. Budd, do	do	17	4	17	14	34	86
Robt. Warnock, do	White Dent	17	4½	18	13	33	85½
Albert Dibby, do	do	18	4	16	13	34½	85½
L. R. Ritchie, Charing Cross	do	17½	4½	17	13	33	85
Hy. Jewell, Northwood	Butter Dent	17½	4½	18	12	33	85
Geo. M. Reid, Baldoon	Leaming	16½	4½	17	14	33	85
Robt. Houston, Chatham	do	17	4½	17	13	33	84½
Napoleon Bourdeau, Dover South	Small Yellow Dent.	17	4½	17	14	32	84½
Napoleon Caron, do	White Cap Dent	17½	4½	17	12	33	84
W. H. Winters, Dover Centre	Yellow Dent	17	4	17	13	33	84
T. Brady, Chatham	Butter Dent	16	4½	16	14	33	83½

POTATOES.

Competitors in Order of Merit.	Name of variety.	General appearance.*	Freedom from blight, scab and insects.	Method and thoroughness of cultivation.	Purity of variety.	Apparent yield †	Totals of scores.
Burk's Falls Agr Society. *Judge—T. G. Raynor.*		Max. score 15	Max. score 20	Max. score 20	Max. score 10	Max. score 35	Max. scr. 100
J. T. Smith, Stirling Falls	Wonderful	13½	10	19	9	25	76½
Wm. Jenkins, Emsdale	American Wonder, Rural New Yorker, etc., all kept separate	13	12	19	9	23	76
Fletcher Walker, Royston	Late Puritan	11½	16	17	9	22	75½
Wm. Chalmers, Burk's Falls	Gold Coin and 1906	11	16	19	5	23	74
Alex. Kennedy, Stirling Falls	Uncle Sam and Natural Cross	13	16	15	6	23	73
Albert Wakeford, Burk's Falls	White Elephant and Empire State.	12	14	15	5	25	71
W. H. Sylvester, do	Empire State and White Elephant.	8	14	15	5	21	63
Wm. Near, do	Several varieties kept separate	8	15	19	3	18	63
Geo. Loutb, do	White Prize, Van Norman's, Rochester Rose and Canadian Beauty	10	14	12	4	22	62
Chas. Inch, do	Empire State and White Elephant.	8	12	15	5	19	59
A. J. Alexander, Royston	Late Puritan	7½	12	12	6	19½	57

* Considering method of planting, stand of crop, vigor of growth, acreage, etc.

† Considering number and weight of marketable potatoes per hill; quality, color, shape and smoothness; state and uniformity of maturity, and freedom from sunburn.

RESULTS OF COMPETITIONS IN STANDING FIELD CROPS.—*Con.*

POTATOES.

Competitors in Order of Merit.	Name of variety.	General appearance.	Freedom from blight, scabs and insects.	Method and thoroughness of cultivation.	Purity of variety.	Apparent yield.	Totals of scores.
WATERDOWN AGR. SOCIETY. *Judge—Simpson Rennie.*		Max. score 20	Max. score 25	Max. score 10	Max. score 20	Max. score 25	Max. scr. 100
Wm. Attridge, Waterdown.....	Carman No. 3.....	11½	17½	18	10	31	88
Wm. Thompson, do	Green Mountain, Abundance, Carman No. 3, and Perfection	11½	17½	18	10	30½	87½
Wm. A. Drummond, do	Noxall	10½	18	16	10	29	83½
Geo. Harris, Flamboro Centre.	New York Admiral and Peerless.....	10	17	17	10	27	81
H. A. Drummond, Millgrove....	Carman No. 3.....	9½	17	16	10	27½	80
David Thompson, Flamboro C.	Green Mountain, Irish Canadian, Gold Coin, Peerless	10½	14½	17	7	27½	76½
Warren Gallin, Waterdown.....	Pearl of Savoy	10½	17	12	8	27	74½
Rich. Attridge, do	Carman No. 3.....	9½	11	15	7	22	64½

GOOSE WHEAT.

Competitors in order of Merit.	Name of variety.	General appearance.*	Freedom from weeds.	Freedom from smut, rust, blight and insects.	Freedom from other varieties and other kinds of grain.	Apparent yield and quality of grain.†	Totals of scores.
MARKHAM AGR. SOCIETY. *Judge—Andrew Elliott.*		Max. score 20	Max. score 25	Max score 10	Max. score 20	Max. score 25	Max. scr 100
P. W. Boynton & Son, Dollar ...	Goose Wheat	17	23	8	19	19	86
Bryson Johnson, Stouffville... ..	do	16	24	8	17	20	85
Ed. Robinson, Markham	do	15	23	8	18	19	83
Jno. Gibson, Milliken	do	15	22	8	17½	20	82½
A. E. Major, Whitevale.....	do	15	21	8	18	20	82
Robt. Chapman, Agincourt	do	12	21	8	19	21½	81½
J. W. Cowie, Markham.....	do	15	23	9	13	21	81
G. B. Little, Brown's Crs	do	16	20	7	16	22	81
Walter Hood, Amber	do	15½	22	8	12	22	79½
Adam Hood, Hagerman.....	do	14	21	8	15	21	79
Jacob Heise, Markham.....	do	14	19	8	18	19	78
Alex Douglas, do	do	16	14	9	18	21	78
W. A. Patterson, Agincourt.....	do	16	22	9	12	19	78
Robt. Sellers, Malvern	do	12	22	8	19	17	78
R. B. Ormerod, Brown's Crs	do	13	20	8	19	17	77
J. W. Johnstone, do	do	14	20	6	15	22	77
Chas. Mason, Ellesmere.....	do	14	21	8	12	21	76
Geo. Morrison, Mount Joy	do	12	21	6	17	20	76
Jas. French, Unionville.....	do	15	18	9	17	17	76
Lyman Kennedy, Agincourt.....	do	11	22	8	16	18	75
J. W. Selby, Markham	do	11	20	7	17	18	73
Wm. Green, Ellesmere.....	do	14	20	7	10	19	70
Alex. Doherty, do	do	13	18	8	12	19	70
Wm. Doherty, do	do	14	18	8	12	17	69
Alf. Mason, L'Amaroux.....	do	12	12	8	12	20	64

*Considering stand of crop, type of plant, vigor and uniformity of growth, acreage, method of seeding, absence of lodging.

†Considering proportion of well-filled heads, of plump grain of good quality, and uniformity of maturity.

RESULTS OF COMPETITIONS IN STANDING FIELD CROPS.--*Con.*

PEA BEANS.

Competitors in Order of Merit.	Variety.	General appearance.*	Freedom from disease and insects.	Method and thoroughness of cultivation.	Purity and variety.	Apparent yield and quantity of grain.†	Totals of scores.
ORFORD AGR. SOCIETY. *Judge—Garnet T. Thompson.*		Max. score 20	Max. score 10	Max. score 20	Max. score 15	Max. score 35	Max. scr. 100
Wm. Blue, Palmyra	Pea Bean	18	9	19	14	32	92
W. C. Sifton, do	do	18	9	18	14	32	91
Wm. Shipp, do	do	18	9	18	14	32	91
Angus Thompson, Duart	do	17	9	19	14	30	89
Alex Clark, Clachan	do	17	9	18	14	30	88
Wm. Spears, Highgate	do	17	9	17	14	31	88
J. Wright, Clachan	do	17	9	16	14	31	87
L. Beattie, Muirkirk	Boston Pea Bean	17	9	17	14	29	86
Jos. Hornal, do	Tree Pea Bean	17	8	18	14	29	86
Jno. Wade, Highgate	Boston Pea Bean	17	8	18	14	29	86
S. Gosnell & Son, Highgate	Yellow Eyed	16	9	17	14	29	85
Geo. B. Newman, do	Pea Bean	15	9	18	14	28	84
Duncan Graham, Muirkirk	do	15	8	18	14	29	84
Jas. Attridge & Son, Highgate	do	16	8	18	14	28	84
Hy. Sifton, Highgate	do	15	8	18	14	27	82
E. L. Moore, Thamesville	do	16	8	14	14	29	81
Jno. B. McDonald, Muirkirk	do	13	8	17	14	27	79
Thos. Lee & Son, Muirkirk	Humphrey Tree Pea Bean	13	8	18	14	26	79
F. W. Scott, Highgate	Yellow Eyed	14	8	17	14	26	79
J. McKay, Clachan	Pea Bean	16	8	15	14	25	78
Wm. T. Street, Palmyra	do	15	8	15	14	25	77
Angus Walker, Duart	do	14	8	15	14	24	75

*Considering method of planting and uniformity of stand, vigor of growth, evenness of crop, and acreage.

†Considering number and size of pods per plant, number of beans per pod, uniformity of maturity, marketable quality, including size, smoothness and color.

Perennial Sow Thistle.

The Perennial Sow Thistle is a pest which is harder to be eradicated than the well-known Canada Thistle. This partly accounts for its rapid increase during the last year or so, and also its roots spread more rapidly and bud more frequently than those of the Canada Thistle. For these reasons it will require a determined effort on the part of farmers to prevent this weed getting a permanent foothold in our midst. It can be readily distinguished from the Annual Sow Thistle, also known as Milk Thistle, because the latter has no running root-stocks and is not quite so large or coarse as the Perennial.

Perennial Sow Thistle. (*Sonchus arvensis.*)

It can be eradicated by thorough spudding, by summer fallowing, by cultivating stubble ground after harvest, by the growing of frequent hoed crops and by seeding to clover, and after taking off a crop or two of this, plowing the sod early and cultivating frequently till the ground freezes.

Wild Oat.

This weed is becoming more prevalent in Ontario and is now found in many parts of the Province. It is an annual with erect and smooth stems.

Wild Oat. (*Avena fatua.*)

The leaves and stems are covered with white bloom, which gives a peculiar white-green color to the whole plant. The main differences between the wild and domestic oats are : (1) In the wild the chaff is thick and hairy, while in the other it is thin and devoid of hairs. (2) The wild oat has a long stiff awn, which is bent and twisted when dry, while the genuine oat has a much smaller and more flexible awn or none at all. The wild oat flowers in July and seeds during July and August. The seeds have great vitality and will germinate after being buried in the soil for a long time, if brought to the surface. This weed can be eradicated by growing hoed crops as much as possible, or by summer fallowing and afterwards seeding to grass.

This is also known as Devil's Paint Brush, and is a weed introduced from Europe. It is found mostly in Eastern Ontario, but is spreading Westward.

Orange Hawk Weed (*Hieracium Aurantiacum, L.*)

The heads are a bright red orange and grow in clusters, the stems being about 12 inches long. The leaves are oval in shape, downy and greyish green in color. The seeds are carried by the wind long distances, owing to their possessing tufts of down. The plant also spreads by means of roots and runners. It flowers from June to August and seeds between June and September. A heavy application of salt is one of the best ways of killing this weed.

Third Annual Report

OF

The Horticultural Societies of Ontario

For the Year

1908

(PUBLISHED BY THE ONTARIO DEPARTMENT OF AGRICULTURE.)

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

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1909.

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TORONTO.

To the Honourable JOHN MORISON GIBSON, K.C., LL.D., *etc., etc., etc.*,
Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the honour to present herewith for the consideration of Your Honour the Report of The Horticultural Societies of Ontario for the year 1908

Respectfully yours,

JAS. S. DUFF,

Minister of Agriculture.

TORONTO, 1909.

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ANNUAL REPORT

OF

The Horticultural Societies

OF ONTARIO

1908

To the Honourable James S. Duff, Minister of Agriculture.

Sir,—I have the honour to present, herewith, the Third Annual Report of the Horticultural Societies of Ontario for the year 1908. It contains a report of the proceedings of the Annual Convention of the Ontario Horticultural Association, with many valuable addresses given thereat, a statement of the receipts and expenditure of the societies in the Province, a comparative statement of members and Legislative grants for 1907 and 1908, and other information in connection with the working of these progressive institutions.

I have the honour to be, Sir,

Faithfully yours,

J. LOCKIE WILSON,

Superintendent

ONTARIO HORTICULTURAL ASSOCIATION.

OFFICERS FOR 1909.

President.....Major H. J. Snelgrove, Cobourg.
1st Vice-President.....R. B. Whyte, Ottawa.
2nd Vice-President.....R. Cameron, Niagara Falls.
Treasurer.....H. B. Cowan, Peterboro.
Secretary and Editor.....J. Lockie Wilson, Toronto.

Directors:

Rev. A. H. Scott, M.A., Perth; W. Jeffers Diamond, Belleville; Miss Blacklock, Toronto; A. Alexander, Hamilton; Jas. Mitchell, Goderich; Geo. W. Tebbs, Hespeler; J. S. Pearce, London.

Honorary Directors:

W. B. Burgoyne, St. Catharines; W. T. Macoun, C.E.F., Ottawa; H. L. Hutt, O.A.C., Guelph.

Auditors:

A. O. Jeffrey, M.D., London; J. A. Ellis, Ottawa.

COMMITTEES FOR 1909.

On Nomenclature: R. Cameron, Niagara Falls; Jno. Cavers, Oakville; H. B. Cowan, Peterboro; Wm. Hunt, O.A.C., Guelph; W. T. Macoun, C.E.F., Ottawa; J. Lockie Wilson, Toronto.

On Novelties: W. T. Macoun, C.E.F., Ottawa; Prof. H. L. Hutt, O.A.C., Guelph; Miss Blacklock, Toronto.

Press Committee: Jno. Cavers, Oakville; W. T. Macoun, C.E.F., Ottawa; Rev. A. H. Scott, Perth.

Committee on the Incorporation of Horticultural Topics in new series of School Books. Rev. A. H. Scott, Perth; W. B. Burgoyne, St. Catharines; J. S. Pearce, London.

Ontario Horticultural Association

ANNUAL MEETING.

The third Annual Convention of the Ontario Horticultural Association, which was held in the City Hall, Toronto, on Tuesday and Wednesday, November 10th and 11th, 1908, was the most successful in the history of the organization. Enthusiastic delegates were present from all parts of the Province. There was no lack of interest from the first session to the last. All seemed imbued with a determination to make the coming year an epoch-marker in advancing the cause of Horticulture and civic improvement in Ontario.

PRESIDENT'S ADDRESS.

By Major H. J. Snelgrove, Cobourg.

It is with the greatest possible pride and pleasure that I welcome you here at our third annual Convention. During the year your executive have been aided by the valuable services of our new Superintendent, Mr. J. Lockie Wilson, who had previously taken a prominent part in the great field of Agriculture. During the past year he has most zealously and faithfully applied himself to the interests of our Association, which we all know he has closely at heart.

I am proud to congratulate our officers and members on a successful year's work. While the Association has given an impetus to improvement in Horticulture, its chief aim may be summed up in the word, education. Our enthusiasm has been increasingly directed to heightening happiness by disseminating knowledge through the aesthetic tastes and sentiments of our people.

The chief functions of our Association in this forward movement are to investigate, to discover, to lay the experience of mankind under tribute to encourage the pioneers, to inform the workers, to develop plans and to secure means to agitate and to create public opinion, to improve and guide the work, until it has been assimilated in the life of the community.

Our only object is the benefit of the common people. What is more elevating in the moral sphere, or what is more conducive to the health and wealth of the Province in things material, than the work in which we are engaged? The topics here discussed are of vital interest to thousands of our fellow men.

The example of a real work of public service such as we are rendering is like an electric torch held aloft by the arm of a lofty statue, which casts its refulgent beams far over the troubled waves of life.

Such a programme as is here presented may assist active workers in the limited fields to appreciate the labors of others, increase the feeling of mutual fellowship between our affiliated societies, lead to co-operation, and enable those who are prone to regard with suspicion the efforts of social reformers, to hold them in honor and esteem.

A Fine Home at Cobourg.

Photo from Major H. J. Snelgrove

A Private Park and Fish Pond at Cobourg.

Photo from Major H. J. Snelgrove

The theme of my address is "The Ministry of Beauty." The unit of the nation is the home. That word means the family and its residence, with a thousand objects and memories which surround the world with sentiments beautiful and tender. It is in the family that all citizens learn the lessons of usefulness, self-sacrifice and co-operation, essential virtues in the general work of mankind.

If for any reason parental duty remains neglected, then the community, the church, the society, the state, must supply the defects and that means that certain persons, perhaps in addition to their own duties, must carry part of the burdens of others. Thus we see that all society is interested in the conduct and welfare of each family. In some homes we merely notice an inferior intelligence, in other instances there is positive misery. Tidiness, cleanliness, happiness are impossible. The family life is starved and sterile. The house is a mere place in which to eat and sleep. Existence is on the animal plane. The husband has no chance to cultivate a human quality, and the bar-room seems to him a paradise. Such men move in a fatal circle.

Not only should the physical wants of every domestic circle be supplied, but the intellectual atmosphere should be charged with high thoughts and lofty ideals. The sense of beauty should be developed by flowers, pictures and music. Is it not for lack of these elements of a happy home life that we find so many boys and girls aimlessly roaming the streets after dark exposed to direful temptation and evil influences?

We make our homes and they turn upon us the image of our own tastes and permanently fix them in our nature. Our gardens and our environment deaden or brighten our souls. The dwelling, its walls, windows, furniture, pictures, ornaments and flower beds, all act constantly upon the imagination and determine its ideal. If a family realizes this truth, it will seek to beautify the objects which are silently and increasingly writing their nature upon the man within the breast. When the families of a community give no heed to this truth, there is room for missionary work by the Horticultural Society. This is the logical argument for our existence as an Association. The activity of shaping intelligence becomes in this connection an important factor in the life of the state.

Refined desires quicken ingenuity and give force to industry. In this practical age the air is rife with schemes of betterment, many of which, like early May blossoms, will perish frost-nipped and wind shaken.

All that is achieved in the sphere of voluntary action must be the result of personal enterprises and patient toil. Man cannot be blessed in spite of himself. The sluggard's garden will always raise a luxuriant crop of burs and nettles so long as it is neglected.

"You will hear every day," said Ralph Waldo Emmerson, the inspired prophet of New England, " the maxims of low prudence. You will hear that the first duty is to get land and money, place, and name. 'What is this truth you seek?' What is this beauty?' Men will ask with derision. If, nevertheless, God hath called any of you to explore truth and beauty, be bold, firm, and true."

Thus let us unite to promote the elements of popular welfare. It is the duty of the Government not only to protect the lives and property of its citizens, not only to foster its industries, but to encourage a refined taste in the home-making of its subjects.

The final cause of education is not near industrial efficiency, but that for which mechanical skill is itself a means, viz., the production of a complete and happy life. For our education to be useful in the true sense of the term, we cannot ignore the training of the aesthetic faculties as much for moral as for utilitarian ends.

A Beautiful Driveway in Cobourg.

Photo from Major H. J. Snelgrove.

If we are to provoke a revulsion against untidy streets, hideous alleys, tumble down houses, repulsive garbage heaps, offensive advertisements of black and yellow on dead walls and mountain sides, we must become teachers of beauty. Against these gross abuses of the senses of sight and smell, our school children should be taught to wage strenuous warfare. Beauty is good in itself. A tree may bear no fruit, but if symmetrical and casting a grateful shade it is useful.

Listen to the song of nature, so beautifully interpreted for us by Sidney Lanier in his "Symphony":

"Whence and Why
Man's tender pain, man's inward cry,
When he doth gaze on earth and sky?

I speak for each no-tongued tree
That, spring by spring, doth nobler be,
And dumbly and most wistfully
His mighty prayerful arms outspreads
Above men's oft unheeding heads,
And his big blessing downward sheds.
I speak for all shaped blooms and leaves,
Lichens on stones and moss on eaves,
Grasses and grains in ranks and sheaves,
Broad fronded ferns and keen-leaved canes,
And briery mazes bounding lanes.

So Nature calls through all her system wide,
Give me thy love, O man, so long denied.
But Oh, the poor! the poor, the poor,
That stand by the inward opening door
Trade's hand doth tighten evermore,
And sigh their monstrous foul-air sigh
For the outside hills of liberty."

There is one great art which every family in the nation can cultivate and which all local and municipal governments and associations can assist; the art of making the face of Nature beautiful.

Where shall we begin? Perhaps with window gardens overlooking a dusty street. At least we shall have one spot of color. Only a pot of earth and a few seeds may give hints of a regained Eden. Or if the home is a cottage, with sufficient space between wall and walk for only a few plants, the narrow plot shall tell the passer-by a story of peace and aspiration, and make him wish as pretty a picture for the eyes of his own wife and children. The rude laborer may be redeemed from his degrading pleasures by the garden and the flowers.

The ugliness of our towns and villages usually arises from the fact that they are like original chaos, without form or plan; the creation of mere individualism. Each man builds his own house as he pleases or as he can. The result is a wilderness of irregularity. Here is a shabby shack next door to a handsome business block, a grimy coal yard opposite a well appointed hotel, a vacant lot overgrown with weeds and thistles adjoining a neatly trimmed lawn in front of a church, a wild and disorderly wood yard opposite a public park. Mutual respect, municipal pride will some day put an end to this unseemly state of affairs and bring beauty and order into slumdom, where so many of our people are compelled to dwell and rear their children. Missionaries of beauty are wanted to enlist in this crusade against ugliness. But it will require a long struggle with stupid apathy and vulgar indifference before the rude pioneer arrangements of our towns and villages are transformed into what the poet calls "a vision, a delight, a desire."

We need city commissions who will call in a competent landscape specialist to plan their parks and open spaces. For example, the visitor to Detroit can see at Belle Isle what a genuine artist can make of a perfectly flat and swampy piece of ground. Look again at Holland, the flattest country is Europe, much of the soil of which was originally sand in which no plant would grow. The land has been redeemed and fertilized, trees planted, flowers cultivated and the naked sterile earth covered with living forms of beauty.

Look again at New England villages, where a charming refinement is manifest in universal flower-gardens, water courses lined with all varieties of shrubs, and highways have become avenues of stately trees. In our own country the finest example of systematized effort is seen in the splendid work of the Civic Improvement Commission, which is rapidly transforming the Federal Capital, less than fifty years ago a huge lumber yard, into the Washington of the North.

There are many improvements to be made that will increase our sum of beauty, of refinement and of general cultivation in every community, thus adding to the national happiness of hundreds of thousands of fellow Canadians unhampered by traditions which produce stagnation rather than progress. We should courageously press forward with the work that deserves and I believe will receive a loyal support of the public-spirited people of Ontario.

In union there is strength.

Julia Ward Howe's name gives high sanction to the thought of seeing the best men and women move in sympathy and harmony and linked together by zeal and service to all ranks of their fellow-creatures; this is what each owes to his country.

The chant of the poet of English Socialism projects a vision worth cherishing in this free land of Canada:

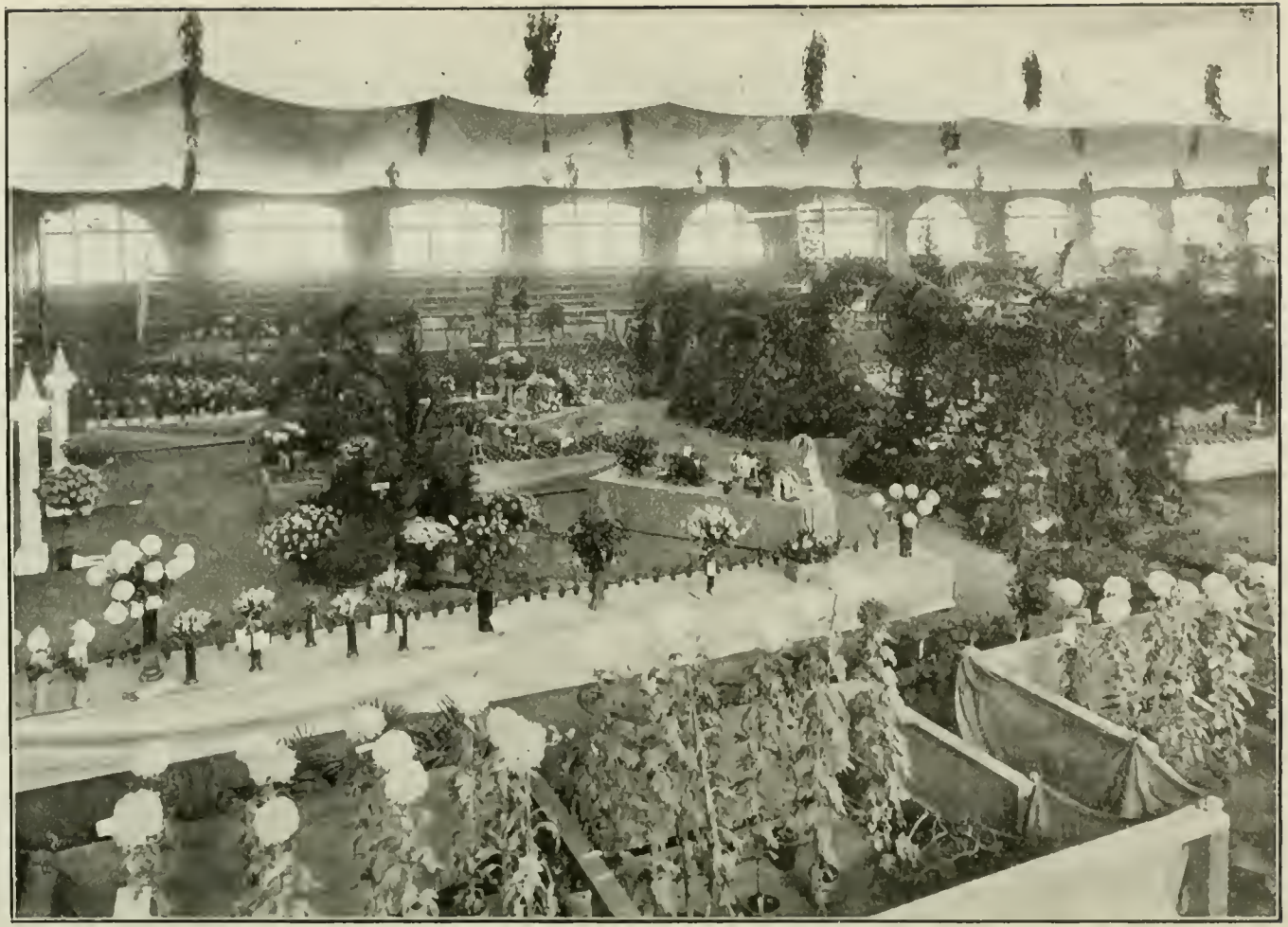
> "And what wealth, then, shall be left us, when none shall gather gold,
> To buy his friend in the market, and pinch and pine the sold?
> Yea, what but the lovely city, and the little house on the hill,
> And the wastes and the woodland beauty, and the happy fields we till?

REPORT OF THE SUPERINTENDENT.

By J. Lockie Wilson, Toronto.

In presenting this my second report as Superintendent, and as your Secretary and Editor, I am pleased to be able to state that the year just closed has been one of progress. With a few exceptions, the Horticultural Societies throughout the Province are extending their work, increasing their membership and devoting their energies not only for their own special benefit, but also for the beautifying of the cities, towns and villages which are their headquarters.

A number of meetings have been held in different parts of the Province to which speakers were sent, whose expenses were in part paid by the Department. Notable among these were the ones held in St. Catharines, Hamilton, Toronto, Cobourg and Perth, at which Mr. J. Horace McFarland, President of the American Civic Association, delivered addresses. His lectures were of great interest, and being illustrated with stereopticon views, were greatly appreciated by all who heard them. Mr. McFarland is so filled with



Ontario Horticultural Exhibition, Toronto, 1908.

Ontario Horticultural Exhibition, Toronto, 1908.

enthusiasm for civic improvement that he never fails to make an excellent impression on his hearers, who go away from these meetings with a high resolve to become themselves enthusiastic disseminators of the gospel of Civic Improvement. The Directors of the American Civic Association are anxious to co-operate with us in every possible way, and a proposition has been made for our affiliation with them. This is a question which should receive the attention of this Association, as they are a much older organization than ours and have accummulated a valuable fund of literature which would be of great assistance to us in our work. You will doubtless, be pleased to hear that the first move in the direction of closer connection was to make your Superintendent an honorary member of that body, which is doing such splendid work in beautifying the homes of American citizens.

We have to express our hearty thanks to Messrs. Hutt and Hunt, of the Ontario Agricultural College, Guelph, for their valuable assistance in promptly responding to the call to speak at different meetings. A number of amendments to the Act respecting Horticultural Societies were passed at the last Session of the Legislature, which were in substance as folows:—

Section 9, subsection 2, has been amended so that instead of a society being limited as formerly to an expenditure of not more than one-third of its total receipts in any particular line of work, it is now legitimate to expend up to one-half for such purposes.

The annual meetings of societies must now be held during the first week in November. If through any cause a society fails to hold its meeting during the said first week the Minister of Agriculture on petition of twenty members may appoint a time for holding the same not later than December 31st in the same year.

In the event of the annual meeting not being held previous to December 31st, or if the number of members on July 1st in any year is less than the number required for organization, the society shall not be entitled to any further grants and shall be deemed to have been dissolved. The change in this section is in the date, which has been extended from May 1st to July 1st.

In section 12 referring to the dates when the reports are to be sent to the Department, the words "within one month" have been changed to read "not later than the first day of February." There has also been added the following sub-sections: "The Minister may require that any of the statements referred to in the above reports shall be attested by affidavit in such form as he may prescribe." Section 17 (A) with reference to the affidavit to be furnished now reads as follows:—"On or before the first day of July, of each year, the officers of every society shall send to the Department an affidavit that may be sworn to before any Justice of the Peace or Commissioner. stating the number of members in good standing at the time of making the same." This declaration, as will be seen, now covers only the number of members, and does not contain a statement of the expenditure for various purposes. I am of opinion that the Act should be amended so that the affidavit should cover the expenditure as well. The affidavit only asks for the number of members; you will agree with me that that should be amended and the sworn statement include the expenditure.

That declaration was put in the Agricultural Societies' Act. The Treasurers are required to swear to the number of members on a certain date, and also to the expenditure for agricultural purposes. I do not suppose any officer of a Horticultural Society would wish to misrepresent the facts in his statement in order to get a larger grant, but we must be above suspicion and the Department will arrange to have the Act amended in this connection.

Clause B. of section 19, which provides for the division of the legislative grant, has been changed. The words "as shown by their sworn statements provided for in section 17" now read "in accordance with the provisions of section 19."

The special $800 grant to Horticultural Societies in cities having a population of thirty thousand or over is now based on the membership of the preceding year, instead of the current year as previously. An additional clause to section 19 makes the following provisions:—"Societies in the first year of their existence shall receive grants at the rate of $1.00 for each paid up member on the first day of July, said grant not to exceed $100." These, in brief, are the amendments to the Act. Among the Societies in the Province which have made a decided advance both as regards membership and the work done during 1907 and 1908 are Ottawa and St. Catharines. This has resulted in an increase of the grants to them, Ottawa securing $135 and St. Catharines, $430 more this year than last. Under the Agricultural Societies Act, the maximum grant allowed to any society is $800. I would suggest that the Horticultural Societies' Act should have a similar clause, defining the maximum amount which a society should receive.

A partial reason for the decrease in the grants to some of the societies is that under one of the amendments of the Act new Societies which have a paid up membership list of 100 on July first, can receive a grant of $100. Three new ones qualified for this amount this year, viz., Amherstburg, Sault Ste. Marie and Walkerville. If through your efforts fifteen new societies were organized in any one year, the amount to be divided among the older ones would be seriously impaired. This would seem to be a deterrent to the efforts of established organizations to extend the good work.

The following shows the comparative units on which the grants for 1907 and 1908 are based:—Membership, 1907, 37; 1908, 37. Expenditure, 1907, 32; 1908, 26.

The number of societies in good standing at present is 60. No returns for 1907 were received from the following:—Dunnville, Niagara Falls, Orillia and Preston. Orangeville made only partial returns but held no annual meeting. The amount of grant paid to these five societies in 1907 was $476, and their membership was 421. The total membership of societies in good standing up to this date as reported is 7,500. When all returns are in we shall have over 2,000 more members than last year.

You will notice that one society that dropped out was not bankrupt; it had two hundred dollars to its credit and it handed over the funds to some other organization, and that was quite illegal. Any monies in the hands of a society that passes out of existence should be returned to the Department to be divided up as it sees fit.

In 1908, sixteen societies out of sixty affiliated with the Central Association. I have written several times to the secretaries asking them to affiliate and participate in the benefits derived from belonging to this organization. So far twenty-eight have sent in their affiliation fees for 1909. I would suggest that the Directors appointed for each district, if they find it impossible to personally visit all the societies which they represent should at least get in touch with them by means of correspondence. In this way they could give valuable assistance and advice to small societies which would be greatly benefited by outside help in creating enthusiasm among their members in carrying on the beneficent work of beautifying the homes and surroundings of their town. Provision, I think, should be made for paying the expenses of the directors while engaged in such work. I wish

St. Catharines Horticultural Exhibition, 1908. Photo from W. B. Burgoyne.

to convey my thanks to our President and Messrs. Whyte, Burgoyne and Cowan for the excellent photographs and illustrations with which they supplied me for my last Annual Report. I take this opportunity of asking the members of Horticultural Societies throughout the Province to lend their assistance in procuring photographic views of gardens, lawns and flowers for our next report, which will add materially to its educational value and usefulness.

There is no institution in the Dominion of Canada that has a tendency to do greater and better work for the uplift of humanity than the Ontario Horticultural Association. I know whereof I speak, and with enthusiastic workers we are destined to do untold good to the fair Province of Ontario.

I have to thank you kindly for the courteous hearing you have given me, and for the many kindnesses extended to me by all members of the Horticultural Societies of the Province.

R. B. WHYTE: You say you wish a sworn statement made of the returns before the end of July. Couldn't that be fixed so that it could be sworn to at the time of the annual meeting?

The SUPERINTENDENT: You would be in a better position to make your statement by the first of July.

Prof. H. L. HUTT: Mr. Wilson has referred to some of the old societies dropping out. There is room for a lot of work in organizing new ones. Many towns would have live societies if they only had someone to take the initiative. There should be some funds provided whereby we can employ an organizer. Last week I was down in the village of Stirling. They have a society that has been organized twelve years. They have stuck to it, and are doing splendid work. It is only a small town with hardly 1,000 inhabitants. They would have a representative here, but they have spent all their money in improving the park in the centre of the village.

LAYING OUT AND PLANTING OF SMALL GARDENS.

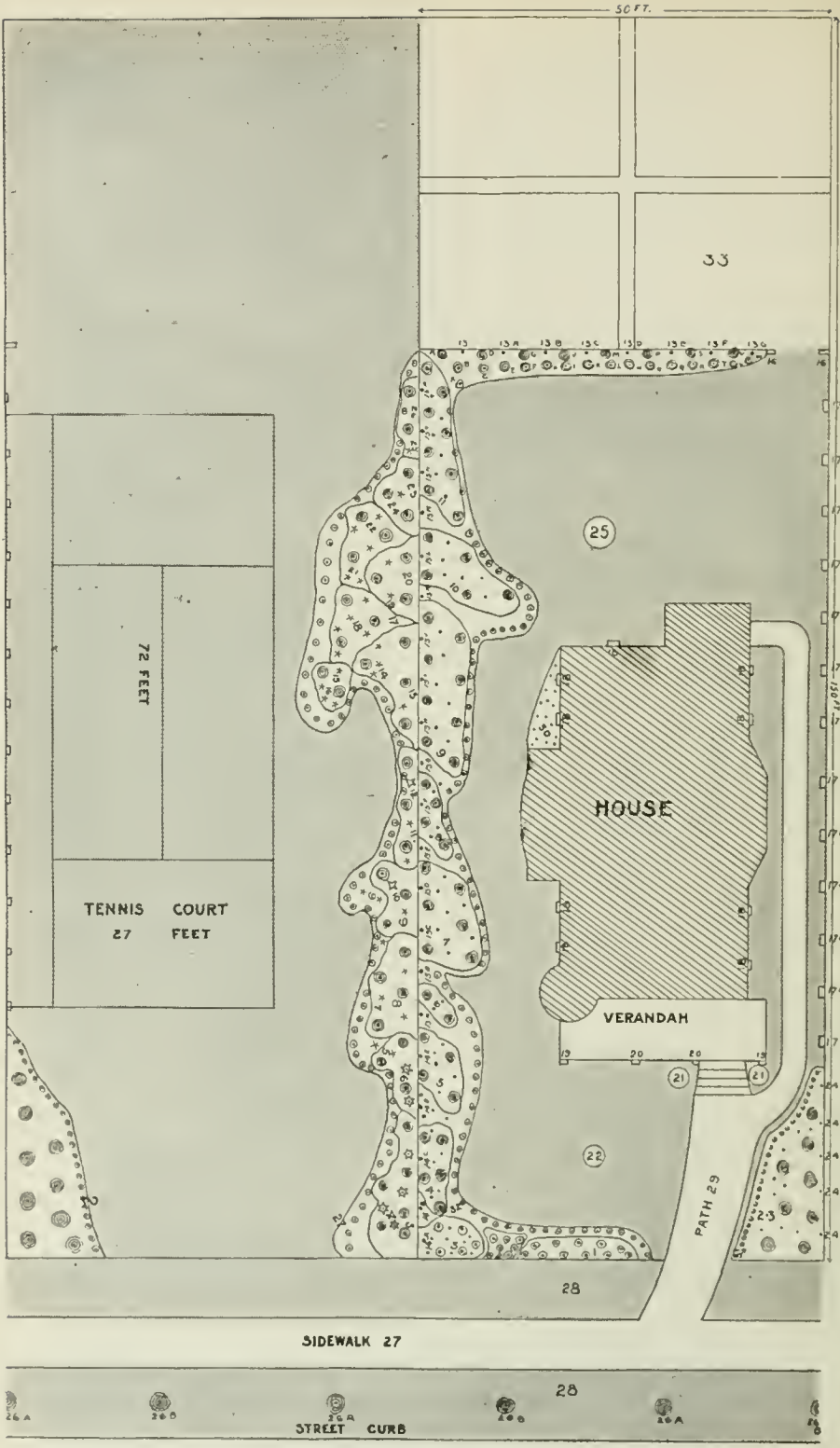
By RODERICK CAMERON, TORONTO.

I have prepared a double plan of a city or town lot, representing one hundred by one hundred and seventy-five feet. The lot is divided by a line running through the centre, so that if desired by the owner it can be turned at any time into two of fifty feet, and each planted so economically that it fits two purposes, first while it is the property of one person, he has the benefit of the whole, and if one of the lots becomes the property of some one else, the planting benefits both, besides being more attractive to the general public passing by. Another benefit is the extra value added by its being planted, making it more valuable and attractive to the purchaser than one unimproved.

I have planted one of these lots with dwarf evergreens because I have been asked by several persons to do so as they wished to plant with evergreens but did not know which were the hardiest and most suitable for the purpose, and filled in with perennials temporarily.

The second lot I have planted with shrubs and perennials to fill in and cover the ground until occupied by the shrubs altogether.

The numbers on the plans will show where each should be placed upon the lot.



Laying out a City Lot.

Again, if the second lot should be sold the provision is made that the house should be built where the tennis court is laid out; and this, throwing the houses further apart from one another and giving more lawn space between them, helps to beautify the city.

The diagram is laid out to a scale of five feet to the inch.

No.

1. Daphne cneorum and Scilla campanulata.
2. Yucca filamentosa and Narcissus "Von Sion."
3. Pinus montana compacta and Lilium testaceum.
4. Picea excelsa gregoryana and Lilium tigrinum fl. pl.
5. Pinus strobus nanus and Hemerocallis Thunbergi.
6. Thuja occidentalis "Tom Thumb," and Funkia "Thos. Hogg."
7. Thuja orientalis and Larkspur in variety.
8. Picea excelsa pygmea and Yucca augustifolia.
9. Picea nigra Domitta and Pæonia officinalis.
10. Chamæcyparis obtusa and Hemerocallis Kwanso variegata fl. pl.
11. Juniperus virginica glauca and Phlox paniculata, "Bridesmaid."
12. A. Margaret Dickson.
    B. Alfred Colomb.
    C. Mrs. John Laing.
    D. Mrs. Sharman Crawford.
    E. Prince Camille de Rohan.
    F. Paul Neyron.
    G. General Jacqueminot.
    H. Soleil d'Or.
    I. Madam Plantier.
    J. Baroness Rothschild.
    K. Duke of Edinburgh.
    L. Fisher Holmes.
    M. Frau Karl Druschki.
    N. Salet Moss.
    O. Baby Rambler.
    P. La France.
    Q. Glory of Mosses.
    R. Anne de Diesbach.
    S. Victor Verdier.
    T. Baron de Bonstetten.
    U. John Hopper.
    V. Coquette des Blanches.
    W. Frau Karl Druschki.
    X. La France.
13. A. Crimson Rambler.
    B. Dorothy Perkins.
    C. Queen of the Prairie.
    D. Crimson Rambler.
    E. Dorothy Perkins.
    F. Queen of the Prairie.
    G. Crimson Rambler.
14. A. Clematis paniculata.
    B. Clematis Jackmani.
    C. Clematis paniculata.
    D. Clematis Jackmani.
    E. Clematis paniculata.
15. A. Celastrus scandens.
    B. Actinidia polygama.
    C. Hall's Honeysuckle.
    D. Clematis virginica.
    E. Belgian Honeysuckle.
    F. Celastrus scandens.
    G. Actinidia polygama.
    H. Hall's Honeysuckle.
    I. Clematis virginica.
    J. Belgian Honeysuckle.
    K. Celastrus scandens.
    L. Actinidia polygama.
    M. Hall's Honeysuckle.
    N. Clematis virginica.
    O. Belgian Honeysuckle.
    P. Celastrus scandens
16. Aristolochia sipho.
17. a, b, c, d, e, f, Worden grape vine for arbor; g, h, i, j, k, l, m, aristolochia sipho.
18. Amphelopsis veitchi.
19. Aristolochia sipho.
20. Clematis paniculata and Jackmani planted together.
21. Vases filled with tender plants.
22. If clay soil, weeping English Beech or weeping Rivers Blood-leaved Beech. If good loam, then plant cut-leaved weeping Silver Birch, or the Maiden Hair Tree.
23. Thuja occidentalis globosa and Funkia undulata; Thuja occidentalis argentea variegata.
24. A, B, C. D, E, Clematis paniculata.
25. Clothes green.

26. Street trees 20 feet apart; those marked "a" are nurse trees eventually to be cut out, leaving six 40 feet apart, the proper distance for street trees. European Basswood and Acer saccarina nigra are good.

27. Sidewalk.

28. Boulevard.

29. Path.

30. Tuberous begonias.

31. Festuca glauca (border).

32. Pachysandra terminalis, arabis albida fl. pl.; armeria vulgaris, either are good, choose one.

33. Kitchen garden.

THE SECOND LOT—FLOWERING SHRUBS.

No.

1. Deutzia gracilis Lemoinei and Spiræa "Anthony Waterer" alternately.
2. Phlox sublata.
3. Deutzia gracilis.
4. Phlox "Coquelicot."
5. Spiræa japonica (callosa).
6. Campanula persicafolia.
7. Viburnum japonicum plicatum.
8. Delphinium.
9. Campanula cactiflora.
10. Viburnum opulus aurea.
11. Weigelia rosea "Eva Rathke."
12. Coreopsis lanceolata.
13. Exochorda grandiflora
14. Funkia lanceolata undulata aurea.
15. Berberis Thunbergi.
16. Potentilla fruticosa.
17. Weigelia floribunda Lavallei.
18. Monarda didyma.
19. Spiræa venusta.
20. Philadelphus aurea.
21. Spiræa Van Houttei.
22. Physostegia virginiana alba.
23. Physostegia virginiana.
24. Syringa vulgaris "Marie Legraye."
25. Syringa josickœ.
26. Veronica longifolia subsessilis.
27. Border of either Veronica rupestris, Poa trivalis variegata, or Aubretia Hendersoni.

I am quite alive to the fact that this plan will bear criticism, that it and its contents will not suit every situation and soil, but it can be modified to suit.

The soil should be deeply dug and well pulverized after receiving a heavy coat of manure, so that it may hold moisture throughout the season. It should be frequently stirred during dry weather, or a mulching of manure placed to cover the surface of the soil under the plants to keep them cool and damp. They should not be allowed to dry at the roots before being planted, particularly evergreens.

WINDOW BOXES, HANGING BASKETS, AND RUSTIC STANDS.

By Wm. Hunt, Florist, O.A.C., Guelph.

There is no feature probably of floral decorative art that presents greater facilities for the display of intensive and artistic taste on the part of the flower lover, or that can be more universally made use of, than the making and arranging of window boxes, hanging baskets, and rustic stands, for the outside adornment and brightening up of the environment of the home in summer. This is especially true of homes in cities and towns, where for want of garden space, unsuitable conditions from surrounding buildings, and for other reasons, it is not possible to have the more elaborate and expensive features of floral adornment, such as flower beds, flowering shrubs, and other features of landscape art. The addition of a few window boxes, rustic stands, etc., will often transform an otherwise unattractive, unpretentious, or perhaps positively unsightly building or its surroundings, into a pretty, bright, pleasant and attractive spot. Not only is this true of residences and homes, but also of public buildings, offices, factories, and schools. Many of our public and civic buildings throughout the Province present a most deplorably bare and desolate appearance that could be changed—at least in the summer time—and the buildings made to look much more pleasing and inviting in appearance, by the addition of a few of the artistic features forming the subject of this paper, and thus help to brighten up whole blocks of perhaps otherwise bare and unattractive buildings. Many large factory owners have already taken the initiative in this respect by planting vines and climbers around their buildings, and putting boxes of plants in the windows of their factories, thus helping not only to give an air of brightness and prosperity to the surroundings, but also to cheer and brighten the sometimes monotonous character of the labor of the employees. It is pleasing to know that where this innovation has been tried it is considered to be a remunerative proposition from all points of view.

Around our schools, especially in cities and towns, where from the crowded surroundings there is seldom little room for flower beds and borders, and other decorative landscape features, a few window boxes or rustic stands would make more bright and attractive the surroundings of many of our scholastic institutions. The plants and flowers would also assist teachers materially by supplying natural subject matter for their botanical and nature study lessons, as well as helping to develop in the scholars a love for all that is beautiful in the floral world, and create an interest that would doubtless continue to increase and develop long after the scholar had left the precincts of the school. The same remarks will apply to the surroundings of many of our village and rural schools. It is a matter however of congratulation, that our horticultural societies have been the pioneers in this respect, and have done good work among our young people in endeavoring to interest and educate them in their taste and love for plants and flowers in various ways.

I need not enlarge, however, upon the desirability for the more universal use of the particular features that form the subject of this paper, but will endeavor to give a few ideas of how to attain the best results with these recognized and valuable adjuncts and accessories to floral decorative art, for the beautifying of homes and other surroundings mentioned.

How to Make Window Boxes. A window box does not necessarily require to be of an elaborate or expensive nature, so long as it is strong enough to stand the pressure of the weight of soil used, and resist the efforts of gales and winds to dislodge it from its position. A plain wooden box made of one inch dressed pine of the following dimensions will be found very useful, inexpensive, and effective.

Length of box (over all) should be about the width of the window itself, not including the window frames. The two or three inches width of frames on each side of the window will allow for covering the box with cork bark, or other material if required, of which more will be said later on. The dimensions given here can of course be changed to some extent so as to suit the style of window, but care must be taken not to have the box too large, so as to be heavy or unwieldly.

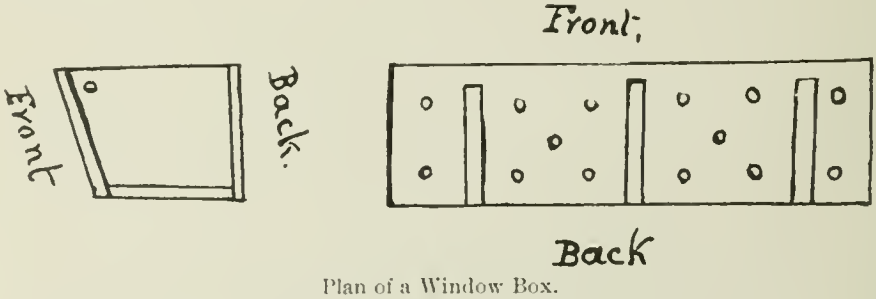
Width of box at top (inside measurement), 9 to 10 inches.

Width of box at bottom (inside measurement), 8 to 9 inches.

Depth of box (inside measurement), about 7 inches.

The difference in the width of the top and bottom of the box will allow the front to stand at an angle or slope outwards from the bottom up, thus avoiding the common box-like appearance which a perfectly upright front board would have. This method also allows the drooping varieties of plants to hang clear, thus adding to the effect, as well as being beneficial to the plants. The bottom of the box underneath should have three or four thin cleats of wood one inch in width and half an inch in thickness nailed to the outside of bottom to allow of free drainage, and prevent the rotting of wooden sills. Some half-inch holes should be bored about six inches apart in the bottom for drainage purposes. It should be painted outside, and two inches down from top on inside. A dark, dull, olive-green color is best for this purpose. A small iron staple or screw-eye should be placed on each end near the front top corner to support it when placed in position. A piece of strong wire, or an iron hook fastened to the screw-eyes or staples placed in the window frames should be used for this purpose. The box should have at least three inches bearing on whole length of window sill. A piece of galvanized sheet iron may be placed on sill to prevent it from rotting.

The following diagrams will perhaps be of service in the construction of the box:



Plan of a Window Box.

A box constructed as stated will with ordinary care last for nine or ten years if given an occasional coat of paint.

A more elaborately constructed one can be had by having the bottom project about an inch on the front and ends, and the edges nicely rounded. Beading can also be used effectively for appearance sake. All of these, however, are of little real use, and only serve to help rot the box. It is much better for the successful growth of the plants to have a plain box as des-

Plain Window.

Plain Painted Box.

Box Covered with Native Bark,
Lichen and Fungi.

Box Filled for Shaded Position.

Box Filled with Plants for More
Sunny Position.

Rustic Stand, Bottom Part of Apple
Barrel, 15 Inches Deep, Covered
With Native Bark, etc.

cribed, covered with virgin bark, or even the bark of some of our native trees, which should be nailed on firmly. Flat pieces of bark are best for covering window boxes. It may be necessary to run a saw cut partially through the cork bark lengthwise on the inside, to make it more pliable, and set closer. The bark of the hard maple, ash, and walnut, are particularly well suited for this purpose, especially if taken from a recently felled tree, when the bark is pliable and easily placed in position. The covering of bark—or bark and moss—as seen in the illustrations, not only gives the box an artistic and rustic looking appearance, but also helps to prevent the soil from drying out as quickly as it does in a plain wooden one, a point worthy of consideration, especially if it is placed in an exposed, sunny situation. Covering the outside with small pieces of split cedar nailed on has a good effect from an artistic point of view, as well as preventing the soil from drying out too rapidly. These are some of the methods by which window boxes can be made more artistic and less crude looking than we often see them, and also give the plants the best possible conditions for successful growth.

Soil for Window Boxes. A good rich, loamy compost, about two parts loamy potting soil and one part of well rotted barnyard manure with a little bone meal, makes a good soil for window box plants generally. It is of no use expecting good results in window boxes if poor soil is used in them. I have found it a good plan to put a sprinkling of bone meal or a thin one-inch layer of well-rotted barnyard manure spread over the soil about an inch from the bottom. This serves as a reserve fertilizer when the balance of the soil has become exhausted.

When to Fill Window Boxes. Window boxes should not be filled until it is about time to place them in position. In fact, I prefer filling them after they are placed in position if possible. Boxes filled a few weeks before they are placed in position may look better at the time, but long before the season is over they begin to look shabby from the soil having become exhausted and filled with roots, a condition it is difficult to remedy even with the application of fertilizers, or with copious applications of water. Well grown and well hardened plants of a good size and appearance, and the box filled at the time of placing in position, will give far more satisfactory results for the season than one filled earlier that soon gets past its best, even if the changed condition from indoors to outdoors does not at once have a disastrous effect, as it often does on the plants unless shaded for a few days, or placed in a well sheltered position from sun and wind. Good rich soil, and large, well grown, and hardened plants are essentially necessary to have a successful window box. About the first week in June is a good time to place them in position.

How to Fill and Arrange Plants. No other drainage is necessary beyond the holes in the bottom of the box. Put in soil sufficient to fill box about one-third. Place the plants—after they have been knocked out of the pots they are in—in the position they are to occupy, and make sure that you have them in their proper locations before filling in any more soil. Put the tall plants at the back and the drooping and trailing one in front and ends of the box. Then fill in any open and bare looking spots between with medium height plants. In placing these in position, due consideration must be given to height and habit of plants, as well as color effect, and to have them arranged so that height, density, and color may be preperly balanced and harmonized, without their presenting a stiff, formal appearance. The surface soil of the ball of earth on the plants when placed in the box should

be about an inch or more below the top edge of the box. When satisfied that the plants are properly set and arranged, fill in the soil and pack it moderately firm around the roots, filling in to within an inch of the top. Give water at once, sufficient to moisten all the soil. Avoid over watering afterwards for a few days at the roots until plants are established in their new quarters. Sprinkling water overhead, and shading the plants for a day or two will be beneficial, when first planted. When growth has well commenced, water should be given freely every day except in very wet weather. Water till it runs out through the holes in the bottom of the box every time the plants are watered. Toward the end of the season some liquid fertilizer may be given the plants. An application of fertilizer as used for pot plants once a week from middle of July until the end of the season will be beneficial, or a top dressing of rich soil may be applied about the end of July to advantage. In the autumn many of the plants can be taken out, potted, and placed in the window for winter. It is seldom that the box is of any use for indoor decorative purposes without being refilled. Boxes filled with ferns, bulbs, or plants in the fall, look very nice, however, in a window in winter.

Best Position for Box. Any aspect rather than a directly south one is best. If the windows face the south, the boxes should be shaded by an awning for a few hours in the hottest part of the day. In a window facing the south, and fully exposed to the direct and concentrated heat of the sun against the building the greater part of the day, it is impossible to have complete success with a window box, even if filled with the hardiest sun-resisting decorative plants.

Pot Plants in Summer. Plant lovers, especially in cities and towns, are often at a loss to know what best to do with house and window plants in summer, having no space out of doors perhaps, to stand the plants in the shade for a change and rest, as is customary with those who have facilities for resting plants during the summer in shaded positions out of doors. By placing the box outside of an east, north or west window, with the pots in the box, arranging the plants properly for effect, and packing moss around them, almost all house and window plants can be very much improved in appearance, with but little care and attention. The moss prevents a too rapid evaporation and keeps the roots of the plants cool and moist. Common moss from the bush, or Sphagnum moss can be used for this purpose. This is a much better plan than placing the pots on window sills and exposed verandahs where the sun and wind compel constant and copious waterings, the plants often-times suffering badly even when attended to regularly, in the matter of watering.

Verandah Boxes. These are made similar to window boxes, differing possibly in shape slightly, so as to suit the requirements of the position they are to occupy. If used on floor of verandah, it is well to set the boxes in large trays or pans made of galvanized iron to prevent rotting of the floor as well as for cleanliness.

Hanging Baskets. The ordinary earthenware hanging basket should have the bottom constructed so as to form a saucer, in order to avoid the troublesome, unpleasant, and dangerous operation of either lifting the basket down, or of flooding and damaging the floor of the verandah every time they are watered. Several potteries have adopted the style mentioned, of having a saucer as a part of the basket; but in most specimens that I have seen, the saucer is rather too narrow and shallow to be of the best possible use. The holes through the bottom of the basket into the saucer

placed there for drainage purposes, are also often too small and too few in number to fully serve the purpose for which they are intended. For a lawn and exposed positions, I prefer hanging baskets made of wire. As a rule, the ordinary wire baskets sold are not made large enough to be serviceable. These should be lined at time of filling with thick wads of moss placed around the basket with the green side outward. The soil and plants can then be filled in the same as when using an earthenware basket. Plants succeed better in wire baskets than in earthenware ones, and these should be more used than they are, if only for this reason.

Rustic Stands. These are possibly some of the most effective and easily obtained features of lawn decoration. A rustic stand can be made up of the crudest and commonest materials, if a little artistic and original taste is made use of in connection with their make up. A tub, part of a barrel, or a box of suitable strength and size can be transformed into a really pretty and effective rustic adornment with a few pieces of common lichen or moss-covered pieces of bark from our native trees nailed around them; or they can be covered with cork bark, if something more uncommon and elaborate is required. Small pieces of cedar saplings split in two with the tops pointed so as to represent a rustic picket fence and nailed on the tubs also make a pleasing and effective stand. One of these rustic tubs or boxes placed on a piece of round timber of pine, or any native tree, with the bark left on so as to look as natural as possible, will make a very effective and pleasing object placed around the lawn or grass plot, when filled with flowering and trailing plants. The piece of timber used should be sunk into the ground a little, if not large enough to stand firmly of itself. The box or tub also would be better if fastened down to stand with a piece of wire in two or three places to prevent it being blown or pushed over. Fossil stones, or large stones of any kind, can be used very effectively as stands for the above purpose. An old hollow trunk or pollard of a basswood or other tree, about two feet six inches in height, also makes an effective rustic adornment when filled with good soil and plants. One of these last named filled with scarlet salvia and trailing plants makes a most conspicious and pleasing object on the lawn in the summer time. Rustic stands can be purchased at most of our large seed stores in several designs. The ordinary wire stands are not very ornamental, and not suited for the pot plants out of doors, especially in an exposed sunny position, as the plants dry out too rapidly in them. If these stands were constructed so that moss could be packed around the pots, they would at least have the merit of being useful, if not ornamental.

Plants for Filling Window Boxes, etc. The main point to be considered in selecting plants for any of the before mentioned purposes is their suitability for the position they are to occupy as regards a sunny or shaded position, whether for a window box, hanging basket, or rustic stand. As a rule, plants that do well in a sunny position will succeed to some extent in a shaded position, with poorer flowering results possibly. Plants suited particularly for a shaded position will not, however, succeed well in a burning sunny position, even with the best possible care and culture. This fact should be borne in mind when getting a box filled by a florist or in selecting plants to fill the box or stand yourself, as it is one of the main points leading to success or failure. Tell the florist whether the plants are for a sunny or shaded position when getting the box filled. The tall growing plants are best suited for the back row of the box, the low growing, and those of a trailing habit for the front and ends, and intermediate sized plants for filling in between the back and front row if necessary. In filling rustic stands and hanging baskets place the taller growing plants in the centre.

Another point in the selection of plants is not only to have good sized ones, but to have plenty of them, so as to furnish the box well at once, planting so that there are no bare looking spots when finished. To have a bright and pleasing-looking effect, also select chiefly bright light-colored foliage plants, as well as a preponderance of the lighter shades and colors of flowering plants. A good admixture of white, pink, blue, and yellow should be used to brighten up and relieve the ground work of dark green foliage and heavier shades of scarlet flowers so often seen in window boxes. Brightness is one of the main points to be considered in the effectiveness of window baskets and rustic stands.

The following list of plants includes most of the varieties that can be effectively used for sunny or shaded positions:—

Tall Plants for Sunny and Slightly Shaded Position. Dwarf Lantana, Cannas, Coleus, Salvia, Irisene, Geraniums, Ivy Leaved Geranium.

Low Growing and Trailing Plants. Vinca Japonica, Vinca minor (Periwinkle), Nasturtium, Othonna Crassifolia, Annual and Periennial Sweet Alyssum, Dwarf Ageratum, Nepeta or Glechoma Variegata (Creeping Charlie), Centaurea Gymnocarpa (Dusty Miller), Mesembryanthemum Roseum, Petunia, Verbena, Madame Saleroi and other fancy geraniums, Gnaphalium Lanatum, Gazania Splendens, Perennial Tropaeolums.

For Very Sunny Positions. Cacti, Echeveria, Agaves, Sansevieria zeylanica, Aloes, and other succulent plants can often be made use of.

Tall Plants for Shaded Positions. Palms, Dracenas (Cordolines), Cyperus (Umbrella Plant), Fuchsias, Begonias, Aspidistras, Araucaria (Norfolk Island Pine), Ficus elastica (Rubber Plant), Asparagus plumosus, Pandanus Veitchii, Pandanus utilis, Crotons.

Sweet Peas, Convolvulus (Morning Glory), Tropæolums, Cobea scandens, and Climbing Nasturtiums can also be used very effectively in some positions as a background, as well as forming a shade for the window.

Low Growing and Trailing Plants for Shaded Position. Lobelia, Cuphea (Cigar Plant), Nasturtium, Tropæolum canariensis, Tradescantia (Wandering Jew), Senecio or German Ivy, Lophospermum scandens, Campanula isolepsis, Convolvulus minor, Farfugium (Leopard Plant), Antheriçum variegatum, Asparagus Sprengeri, Festuca glauca, Scirpus riparius.

Many of the plants mentioned, such as Salvia, Ageratum, Petunia, Verbena, Centaurea, Cobea scandens, Lobelia and Tropæolum can be grown from seed. Sow the seed indoors about the end of March or early in April and grow on indoors until the end of May or early June. Sow Nasturtium, Cobea scandens, and Tropæolum seeds, two or three seeds in a small pot, as they do not transplant very well. There is probably no one kind of plant better suited for window boxes than both the dwarf and tall nasturtiums. They are indispensable for this class of plant decorative work. Seeds of these last named sown in the window box about the end of May will of themselves make a pleasing effect, but are later in flowering.

In concluding this lengthy paper, I feel it would not be out of place to mention that the different home decorative subjects mentioned, and similar artistic and rustic features of landscape art, are features that we are deplorably deficient in around our city and rural homes. Those who have travelled in the older lands can testify to the bright, pleasing and restful appearance the rustic and floral adornments in the shape of summer arbors, pergolas, arches, etc., have, in adding to the charm and attractiveness of the lawns and flower gardens of the old land. It is pleasing to see, however, that our people

are rapidly taking up and adopting these and similar features of decorative art for making our Canadian homes bright and attractive, features that not only help to make an ideal home in the truest sense of the word, but that will also assist materially in promoting the happiness and contentment of our people, as well as assisting in developing the best type of citizens throughout our country.

R. B. Whyte: When I was in the City of London last summer, I was very much struck to see the great use they made of window boxes. In such business places as Holborn, you would hardly see a home that had not a window box. They use these things to an extent that we have no conception of here, and the result is a wonderful freshness and beauty of the streets, and that is largely why London is the most attractive city in the world. I was impressed with the beauty and simplicity of the window boxes.

J. S. Pearce: It would be in the interests of Horticultural Societies if the report could be got out in time so that the members of the Societies throughout the Province would get the benefit of that paper next summer. If that is not possible, I think the Horticultural Societies should take that up and have it printed. I also want to refer to Mr. Cameron's very admirable plan for a town lot. It is just my idea of what it should be. Speaking of the straight lines, that is something you cannot impress too much upon gardeners. We are too much imbued with straight lines. In the City of London, sidewalks and houses are all in straight lines with the exception of a few, and you have no idea what an improvement it makes to have a walk swing one way or another. If Mr. Cameron will take the trouble to give us the plan for the single lot, forty or fifty feet frontage, it would add very much to the interest that would be taken in his address.

R. Cameron: The division is in the centre, and it represents a lot fifty by one hundred and fifty. The whole plan represents two lots.

THE PRESERVATION OF SUMMER FLOWERING BULBS AND TUBEROUS PLANTS.

By J. McPherson Ross.

In order to cultivate any plant successfully the grower should know something of the climate of the country of which the plant is a native, its summer and winter temperature and the rainy season; with this knowledge the grower complying with the conditions necessary, can hope to successfully cultivate whatever plant he desires. It is the knowledge of keeping plants in a condition of rest by cold storage that enables the florist to have flowers of any plants at whatever season of the year he may chose to have them in bloom, as for instance lilacs in every month of the year, as well as the lily of the valley; by using natural laws to suit himself, he produces the seemingly impossible, and converts summer into winter and brings the breath of May blossoms and the June fragrance into frosty December and ice cold January. The cultivation and care of the subjects of my paper is so generally known, that at a first glance or thought it seemed almost unnecessary to say anything about it, being analogous to the old saying of "carrying coals to Newcastle," but I have lived long enough to know that there is always something to be learned, —some practice different to others—and we also know that the chief value of a paper is not for what it describes as for the new ideas it suggests, and the discussion of the subjects spoken about often brings forth some valuable facts not generally known.

As I remarked before it is a good plan to study the climate of the country from which any plant comes. Thus the dahlia came originally from Mexico, growing in sandy meadows five thousand feet above the sea, a tropical climate with hot summers and rainy winters. The Canna comes from India and the Gladioli from the Cape of Good Hope, also the home of the Tritoma, Ixias, etc. This fact was well impressed on me in my two years' sojourn in the south engaged in a southern nursery. Fresh from the experience of our northern climate, and the care to protect from frost and the growing of stock through the winter under glass, it was novel to find the Verbena growing outdoors all winter, the Ageratum a wayside weed, and the Lantana a hardy shrub. Still in our rigorous climate so little labor is required to house and winter any bulbs and tubers that need such care that it may be summed up in one line: "When the tops are killed with frost dig up and store in a dry frost-proof cellar." The advice given to winter successfully bulbs and tubers may be applied also to our garden favorites as Caladium, Esculentum, Oleanders, Fuchsias, and such like, Yuccas, Axapanthus and Water lilies.

In a general way our nursery and seed catalogues speak about winter preservation but not enough. Perhaps they are afraid that if they were to dwell at any length on such a subject they would frighten customers and deter them from buying. As most residences built are heated with furnaces or hot water, there is little danger from frost; but where cellars are so heated the only danger would be from over dryness, and it would be safer to store all bulbs and tubers in boxes filled with sand or sawdust or else dig the roots up leaving the soil on them and place in boxes, looking over occasionally in winter and watering when too dry. The four extremes to be avoided are heat, cold, moisture and drought. A proper medium being observed in these extremes very little work is required to winter anything.

The bulbs or corms of the Gladiolus are easily preserved during winter. After the first frosts in October they may be dug up at any time in the month, cutting the stalks off close to the bulb and storing them on shelves or trays in any cool cellar or convenient place that is free from frost. This holds good for all other bulbs and tubers. Having piled them loosely in trays to a depth of not more than four or five inches they may remain till it is convenient to clean and sort them, that is to remove the cormels or bulblets and the old bulbs, sorting the young strong ones back into the trays, properly labeled so as to have them ready for spring planting. It is recommended to keep the bulblets dry for the year without planting as they will do better than if you plant them. When you have only a few bulbs cut the stalks about six inches long, tie them into a bunch and hang on nails in the potting shed like onions.

After the frost has nipped the foliage of Dahlias cut the stalks off within six or eight inches of the crown of the tubers and dig them up. I usually leave them on top of the ground if the weather is not too severe, for a day or two to harden and dry up. Then remove them into the cellar or greenhouse. The best advice to amateurs about keeping Dahlias tubers is, "Wherever potatoes will kept safe so will the Dahlia." The proper temperature is about 50 degrees; higher temperature is apt to start growth, though a little of that will not matter. Where you have a good many you may store them in heaps of two or three deep with the soil all shaken off. Keep them dry. Where you only have a few tubers a good plan is to pack them in the sand. Towards spring overhaul them and divide into suitable size for planting.

The next important summer-flowering plant is the Canna. This being a native of India, is a tropical plant and requires more care than the Gladiolus or Dahlia, and if kept at a lower temperature than 40 or 50 degrees they are

apt to rot, particularly if too damp. If kept too warm they are apt to grow like the Dahlia, though a little growth will not hurt them. Still they are better dormant. They should be stored in the warmest corner of the cellar out of draughts, leaving the soil on the clumps as they come in, or they may be kept covered with sawdust in boxes a couple of feet from the ground, as the dampness and coolness of the soil is apt to rot them. It is a good practice after the frost has cut down the foliage to leave them for a week in the ground to ripen the tubers. Some of the more valued sorts should be potted and kept in the semi-growing state all winter. You can hardly keep them too warm, and there is no difficulty in keeping them safe in the ordinary greenhouse. Towards March they may be divided and potted or placed on benches to start into growth to have them fairly well advanced for outdoor planting about June 1st. Some of the growers have convenient bins for them under the benches, shaking all the soil off them and piling them two or three feet deep. An occasional turning over arrests the growth and keeps you in touch with the condition of the plants.

Tuberous Begonias are coming into general cultivation and are such showy free-flowering plants that I expect to see a more general and increasing use made of them in our flower gardens. For several seasons past I have cultivated a bed of them. Though commonly supposed to flourish only in partially shaded spots, I have seen some fine beds of them fully exposed to the sun and they thrive finely and give great satisfaction when they have light rich spongy soil and are kept well watered. When frost comes, remove them into boxes and let the soil and tubers dry together, keep them at a temperature of 50 degrees and pot early in spring for planting outdoors. I have planted the tubers right out in the garden but this throws them a little too late for the free-flowering season that summer and this is altogether too short as it is. There are a few more plants that I might mention, bulbous and herbaceous, but such advice as is given for Cannas or Dahlias will apply to the rest. Lilies and all the members of the lily tribe in the borders should receive a bountiful mulch of leaves or strong manure to preserve from too severe freezing; also keep the bed well rounded up to insure free drainage. You cannot have a flower border too dry. When manure, or leaves or other litter cannot be had conveniently, a top dressing of soil three or four inches deep dug from the side of the bed and spread evenly over the tops of plants is beneficial, preventing upheaval in stiff soils from frost, and does good all round. It has been truly said that a gardener's work is always six months ahead of him. He sows in spring to have plants in the fall. He preserves his bulbs, tubers and plants in the fall in boxes or bags or on shelves in cellars through the winter to have flowers next summer. Care saves thousands of plants, while neglect destroys millions. From the nature of his occupation the gardener imperceptibly acquires knowledge from constant observation and experience, and, being generally alone in his work, his mental faculties are constantly at work analyzing the causes and deducing reasons for this result and that. No occupation is more refining or edifying, for with his eye constantly on her operations and his head close to her breast Nature whispers many delightful secrets to his ear alone.

H. H. Groff: Mr. Ross advised that a corm be kept over for one season. The question of germination of a corm is a peculiarly important one, and of great interest to those who desire to multiply certain valuable features. In fact, if they do not carry these peculiar characteristise very often very valuable varieties are lost owing to the non-fertility of the corm to germinate successfully. Our practice is to plant all the corms every year, and we find that some of them invariably grow, and some seasons a large

majority of them grow. We have a very valuable type that received a certificate at Washington a few years ago, but its multiplication is rather erratic, some seasons better than others. We plant corms each year and take up the soil, corms and all, and separate them by screens, returning them again to the soil the following year. I think they do better in the open ground.

We are dealing with a semi-tropical plant; it is from home, and our difficulties in Canada which are supposed to be slightly more acute, are not the only ones in the world. I have discussed the matter with Lemoine, the originator of probably the most beautiful strain of Gladiolus, and he says: "They do not come up; some seasons they do quite freely. I think it is due to the climatic condition of the preceding seasons."

R. B. WHYTE: There is an impression abroad that there is danger in keeping them over. Some four years ago I gave away two quarts; and they were kept a year, and they certainly seemed to me to grow with greater vigor and made larger bulbs in the given time than the other ones. I know he sold 10,000 at the end of the second year of very fine bulbs. I never had that success myself.

H. H. GROFF: Everything that comes out of the ground goes into it next year, and we take no more chances than we can help. There are no two seasons alike. We know we are dealing with a semi-tropical plant, and of course a great deal of influence that is latent in that plant is handed to us through the method of transference by hybridization, and it is almost impossible for us to tell what character that plant inherits. It is up to us to do our part to plant and cultivate it, and take chances. We do not get time to think of carrying anything over, because if we did it would be a lost season. If we can get them into the market and get returns for them, so much the better.

The PRESIDENT: We all recognize that Mr. Groff is a prince of hybridization in this Province. We see his name all over the world almost. I succeeded in raising 300 bulbs from corms. The predominating type of flower is nearly all the same dark red, very rich, and I would like Mr. Groff to tell me how it is that when both these corms were taken from different colors they seemed to have reverted to one type.

H. H. GROFF: It is not a question of reversion, but of pure productive vitality. If there are any vital corms in your possession, some have a higher standard of vitality than others, and they ultimately will grow, when the others have been destroyed by natural conditions, or by crowding out by the dominating type, and the reason that your red predominated is because it carries greater vitality and out-lives the others. You understand you are dealing entirely with hybrids. They are made up of certain chemical constituents of which we know little, and it is difficult for us to say what season will come that will destroy these to such an extent that you may ultimately lose those you value the highest. The tendency is downwards and it is a case of the survival of the strongest.

B. LOTT: When Mr. Groff speaks of planting everything in the next season, does it mean everything, or only something very choice or good? I planted a new variety, said to be perfectly white. They came to me in a small shape possessing, apparently, but little vitality, and this fall when I came to look for the small bulbs I could not find them. Can any explanation be given of that? They were said to be a very choice variety of very great value.

H. H. GROFF: Probably they were greenhouse plants, and would not grow. We only keep those worth planting—those that we desire to perpetuate. We screen all from the smallest up and plant without regard to size.

UNDER THE MAPLE'S SHADE.

The trunk of this magnificent specimen is 15 feet in circumference, and its spreading branches extend over 75 feet. It was grown on the farm of London's energetic Parks' Superintendent, the late Mr. J. S. Pearce, and is upwards of 100 years old.

Woodman, spare that tree!
Touch not a single bough;
In youth it sheltered me,
And I'll protect it now.
'Twas my forefather's hand
That placed it near his cot;
There, woodman, let it stand.
Thy axe shall harm it not.

That old familiar tree,
Whose glory and renown
Are spread o'er land and sea;
And wouldst thou hack it down?
Woodman, I conjure thee,
Cut not its earthbound ties;
Oh, spare that aged tree
Now towering to the skies.

When but an idle boy,
I sought its grateful shade;
In all their gushing joy,
Here, too, my sisters played.
My mother kissed me here;
My father pressed my hand;
Forgive this foolish tear,—
But let that old tree stand.

My heartstrings round thee cling
Close as thy bark, old friend!
Here shall the wild-bird sing,
And still thy branches bend.
Old tree, the storm still brave,
And, woodman, leave the spot!
While I've a hand to save,
Thy axe shall harm it not.

FIRST DAY—EVENING SESSION.

The PRESIDENT: It is my pleasant task this evening to introduce, and this Association has the very great honor of having present our new Minister of Agriculture, The Honorable James S. Duff, who has only within a few weeks been called into the King's Cabinet Council of this Province of Ontario. We welcome him here most heartily. We had the very hearty sympathy and kindly co-operation of his predecessor, the Hon. Nelson Monteith. He has been succeeded by a gentleman who began his career on a village green in the County of Simcoe. We look forward with the greatest pleasure and anticipation to the success of the Department under his administration.

ADDRESS.

By HON. JAMES S. DUFF, MINISTER OF AGRICULTURE, TORONTO.

I thank you, very sincerely, for the honor conferred on me in asking me to preside over your deliberations upon this occasion, and also for your kindly reference to myself; also for the very kind words that have fallen from your lips of appreciation of the work and efforts of my predecessor, the Hon. Mr. Monteith. It has been a very great pleasure to me, since I have been asked to take upon myself the responsibility of the position of Minister of Agriculture, to find that wherever I go kindly words are said of my predecessor. I was very closely associated with Mr. Monteith from the time he became a member of the House, in fact, he came in very nearly at the same time that I did. I feel that if I can measure up to the position that Mr. Monteith held in the estimation of the people engaged in agricultural pursuits, then I shall have done fairly well.

The President has referred to the fact that I came from the farm, and that is true, in the ordinary sense of the word. I know pretty well every phase of farm life, and the more I move amongst men. and the more I see of life, the more thoroughly I am convinced that after all there is no life that gives the independence, and such great opportunities for men to become public-spirited, broad-minded and useful citizens as the field of agriculture. The vocation of farming tends to breadth of mind. The man who is behind the counter or in the office following either commercial or professional life has not the opportunity to think of other things like the man who is engaged in agriculture. It is said that some of our greatest men have composed some of their best literature when following the plow. That was very true of Scotland's poet, Robert Burns.

I notice that the first item on the programme is the chairman's speech. I am not in a position to deliver an extended address. I appreciate very much the honor it was to me last night to have taken part in the opening of your splendid Horticultural Exhibition in the St. Lawrence Arena. The show itself was a credit to you. The collections of fruit, flowers and vegetables were such as to send a thrill of pride through every Canadian, particularly every citizen of Ontario, whether he is connected closely with horticulture, or agriculture, or is a plain professional city man. I am pleased to have this opportunity of getting in touch with your splendid organization, composed, as it is, of ladies and gentlemen from every part of this Province, and imbued, as I believe you are, with the Spirit of Civic Improvement. The discussions which will take place in connection with your annual gathering and that of the Vegetable and Fruit Growers will be read throughout the country, and will certainly bring forth good results.

I would not attempt to dilate upon the usefulness of this organization, but would say that the one great object that you as horticulturists have in view, viz., the diffusion of knowledge that will bring about a brightening of the homes of this fair Province, that will lead to a better knowledge of plants, and flowers, and trees, and shrubs, cannot fail to have good effect. In travelling through the country, you pass a farm on which the people have been for many years, and yet you do not see an ornamental tree, not even our own maple, of which we are so proud. You begin to wonder what sort of spirit pervades the owner thereof. Compare that with another farm that you may see, and you will find up the lane and possibly back through the farm, maples and elms, and closer around the home are beautiful evergreens, the cedar, the balsam and the spruce, and on the veranda, in the summer, a lot of beautiful flowers. Then you come to the conclusion that there is more in that home than just the work of the farm. There is something more thought of than plowing, sowing and reaping and gathering in of the fruits, because all these things of which I have spoken tend to higher ideals, and to higher thoughts, and for that reason I feel that there is no organization today that has a greater future before it, looking to the welfare of the people of this Province, than the organization which you represent here to-night.

As far as I am personally concerned, so long as I am privileged to occupy the position which I now have the honor to occupy, it will be my earnest endeavor to help this Society along in every possible way. Not because you are horticulturists, not because you are holding your annual meeting here, but because of the fact that your work cannot help but permeate the great agricultural masses of our country, and of our urban population, in the way of bringing them to think of beautifying their homes, and making these homes a thing of beauty and a joy forever.

Moving and mixing as I have in public affairs, being associated as I was for many years in municipal matters, I have been a fairly close observer of our people, especially the farmers; and I have frequently found a love of beauty and of home surroundings in the hearts of most people. The making of homes beautiful may not have resulted in an accumulation of dollars and cents, but it did more than that, and that which is far better, it brought about a breadth of thought which could not be found under other conditions.

I am glad to be with you, and I shall endeavor this evening not only to carry out the programme which has been placed in my hands, but I shall endeavor to take in, very carefully, the thoughts and ideas that fall from the ladies and gentlemen who will participate in the discussions this evening, and I trust will go away very much improved from having been privileged to be with you.

A FRATERNAL LETTER.

By J. Horace McFarland, Pittsburg, Pa.

J. Lockie Wilson: I received this letter this evening; it comes from Mr. J. Horace McFarland, President of the American Civic Association, and with your permission, I will read it:

Mr. J. Lockie Wilson,
Superintendent of Agricultural and Horticultural Societies.
Parliament Buildings, Toronto, Canada.

Dear Sir,—I am in receipt this morning of yours of November 6, advising me of the meetings on to-morrow and Wednesday in the City Hall of the Third Annual Convention of the Ontario Horticultural Association.

Roses.

I heartily wish I might be able to take train to-day and be with you to-morrow, for I have the pleasantest possible recollections of my meeting certain of the active men in a number of your horticultural associations. I am, however, leaving for an address in a neighboring city, and am deep in the preparation for the important annual meeting of the American Civic Association, which begins in Pittsburgh next week, and to which I heartily wish the Ontario Horticultural Association might see fit to send one or more fraternal delegates.

The Province of Ontario is unique in its provision of a certain basic support for the conduct of the important associations which you superintend. That under recent enactments these associations are permitted, and, indeed, encouraged to take an interest in civic affairs, is another item of advantage to you in Ontario, which I trust you duly realize. No such advantage exists in any state in the American union.

My experience in five cities in Ontario early this year convinces me of several things: First, the greatness of the opportunity before Canadian cities; and, second, the high character and earnest purpose of those serving the public through the medium of the horticultural associations.

The opportunity is yours of profiting by the all-too-many errors of the cities in the States which have gone ahead in development regardless of true civic advance, and of the individual efficiency of the citizen. Now, in a rapidly increasing ratio, these American cities are realizing their errors, and are extensively paying the high price of hindsight, having long ago foolishly disregarded the economy of foresight.

I conceive that the highest function of a municipality is to provide for the happiness and the efficiency of its citizens. The unhappy citizen is not efficient, and the inefficient citizen is a tax on others. Thus the answer to the question of Cain, "Am I my brother's keeper?" is constantly and affirmatively made in connection with the highest economic interests of a community as well as of an individual.

Under your wise supervision and in connection with the high public spirit I know exists, the cities of Ontario should become the model cities of the American continent. They have the opportunity to control the city plan, so that it may be a wise one in each community, tending toward a sane and wholesome development, and with sufficient open spaces to provide the minimum of an acre for every hundred inhabitants of publicly owned and publicly used recreation spaces. The opportunity exists to greatly improve conditions as to city paving, sidewalks, trees, poles, wires, and the like, using the dreadful examples to be seen across your southern border as things to avoid. You have the opportunity to educate your own people in the duties and advantages of good citizenship. You have a smiling climate and a flora which can be made available to all the people through the wise extension of public grounds, parks and flower gardens. I may commend to you most heartily the sentiment of a gifted vice-president of the American Civic Association that we are to work for "beauty that supplies a daily need and not a Sunday pride." I may also urge upon free and prosperous Ontario the insistence of that great Englishman, William Morris, that there should be "beauty for the few no more than freedom or education for the few."

So I send you on behalf of the American Civic Association this greeting, full of hopefulness for the future of the Province of Ontario and the Dominion of Canada. I can see no visible international line in improvement matters. I cannot realize the existence of any arbitrary governmental division between those of equivalent tongue, race and aims who want the best for their communities, regardless of politics, personalities or geographical positions. I could wish that there was a strong Canadian civic association, if there was any importance in a division, but inasmuch as Canada is as much America as is the United States, I would be glad if whatever facilities the American Civic Association possesses for aggressive advance work toward better living conditions might be fully availed of by Canadian communities. To this end I propose membership in the American Civic Association, to the various constituent horticultural societies making up the Ontario Horticultural Association, on exactly the same basis as boards of trade, chambers of commerce, civic clubs, improvement associations, and the like become affiliated members of the American Civic Association in the United States. Access to our fifteen departments for definite advice, the constant receipt of our definite and accurate improvement literature treating of the details, for instance, of the smoke nuisance, the billboard nuisance, the abolition of poles and wires, children's gardens, city planning and the like cannot but be of benefit to all citizens of the American continent, regardless of any geographical lines.

This membership is open to Ontario associations on exactly equivalent terms, as I have said. The cost is but $5 per annum.

In addition to this I propose to you for consideration by the Ontario Horticultural Association the formation of a Canadian Committee, specific official rank for which is being provided for in certain constitutional changes in the American Civic Association, to be brought about at our meeting next week. If the Ontario Horticultural Association sees fit to name three of its members to serve on this Canadian Committee, which

will consist of probably five or seven members, I should be glad to be so notified, and to report that encouraging fact at our meeting next week.

I also again urge the sending of a delegation to Pittsburgh, where the American Civic Association and the National Municipal League will meet in conference and co-ordination under circumstances of extraordinary interest. There will be presented by those responsible for it details concerning the great conservation movement which is of such vast importance to the American continent to-day. There will also be presented for the first time details in regard to city housing conditions, obtained by what is known as the Pittsburgh survey. In addition, the sessions will be full of matters of interest to all communities with the upward look, and I would gladly welcome as large a fraternal delegation as the Ontario Horticultural Association sees fit to send.

With hearty good wishes to the Association as a whole, to its individual members whom I have had the pleasure of meeting personally, and to yourself for many kindnesses, I remain,

Yours truly,

J. Horace McFarland, *President.*

Moved by W. B. Burgoyne, seconded by Rev. Mr. Scott: "That the communication from Mr. McFarland be received and referred to the Board of Directors." I trust the President will call the Board together early in the morning to consider the matters that are suggested and mentioned in this communication, so that they may be brought before the association in the Directors' report which will be submitted to-morrow.—Carried.

HORTICULTURE IN GREAT BRITAIN AS SEEN BY A CANADIAN.

By R. B. Whyte, Ottawa.

Last summer I spent nearly eight weeks in Great Britain, where I went on a purely pleasure trip, and more particularly to see what I could of the horticultural life of England.

Having planned so as to reach England in time to attend the first of the great flower shows, I landed in Liverpool on May 24th and without delay took train for London. Expectantly, as the train pulled out of the station, I looked through the car windows, impatient to get a glimpse of the green fields and trim hedges, of the natural and artificial beauty of the landscape of England, the charms of which poets have painted in such glowing colors. Great as my expectations were I was not disappointed, for we had barely left the outskirts of Liverpool before we were all impressed with the wonderful attractiveness and beauty of the country, and during the journey to London I spent the greater part of the six hours with my eyes to the window panes of the cars eagerly scanning the country both far and near and enjoying the entrancing glimpses of scenes of the highest beauty. It was one continuous panorama, opulent in scenes renowned for their classic associations and for their natural beauty. Among all the beauty of the landscape, I was particularly impressed with the magnificent roads—as level as our asphalt pavements and in most cases lined with beautiful hedges, bringing them out in bold relief in the landscape.

The fields were cleaner than ours and there were fewer weeds; everywhere you looked it had the appearance of being what I might term "well groomed," and this was to be remarked all over the country with the single exception of quite a few miles in the north of England and south of Scotland, known as the Lake Region.

One of the things which impressed me very much when travelling was that almost all of the small towns and villages were conspicuous for the number of good large fields divided into plots about 30 by 50 feet near the outskirts of the towns. These plots are cultivated by the workingmen of the town in their overtime, and everyone who can possibly get a garden has one. This love and appreciation of flowers shown by the people of all classes, from the rich land-owner to the peasant, is so general as to become characteristic. Even the workingmen in their gardens grow great quantities of flowers; roses of every possible color, size and shape which we could only grow here with great difficulty are to be seen all over the place, running over the fences and up the houses to the second storey window. There you will see roses in thousands and tens of thousands, even in gardens about half the size of one of our city lots.

Nowhere is this characteristic love of flowers more shown than in the amount of money each city spends on botanical gardens and parks. Even in Glasgow, which is world-famous as a commercial city, they have the most beautiful botanical garden open to all citizens, with extensive greenhouses open every day in the week, including Sunday. In these gardens they have growing specimens of all the leading wild flowers. This a most valuable educational feature. In London, more than in any other city in the world, they show their appreciation of parks and gardens, and there are some 6,000 acres in parks in that city, some of which are very large. Hyde Park, including Kensington Gardens, has 630 acres; Regent Park, 472; Battersea, 200 acres; all in the very heart of London. Outside the City, the County Council have very large parks, Epping being 5,600 acres. After my return to Canada, I read in the "London Garden" a letter from a horticulturist drawing attention to the floricultural interest or beauty of 10 parks right in the City of London, running from 200 acres downwards, not one of which had I seen. This will emphasize how difficult it is to see in one short holiday all there is to be seen in that wonderful city. In addition to these, there are innumerable small parks and squares scattered all over. One distinguishing feature of London is that wherever it is possible to grow a tree or have a bed of flowers they do so, and there is never any land allowed to go to waste. In the very heart of the city between Fleet Street and the river where land is worth a fabulous sum there is a most beautiful garden, about 3 acres in extent, known as the "Temple Garden."

My object in going to England when I did was to be in time to see the Temple Show of the Royal Horticultural Society of England, which is considered the greatest flower show in the world. It is a most wonderful sight, and although I went expecting to see a great deal, I must say that my most sanguine expectations were not disappointed.

The Royal Horticultural Society has 11,000 members, mostly in the British Isles. There are about half a dozen members in Canada and perhaps a dozen and a half in the United States. The subscription price is $5.00, so that their funds enable them to do a great deal, and on a large scale.

I must explain that the "Temple" is not a religious building, but takes its name from being originally a lodge of the Knight Templars of England and has been maintained by the Law Society since the 12th century. In 1346 it came into the possession of the "Students of Common Law" and has ever since been their home. One hundred years after that it was the scene of an important historical event. Shakespeare in King Henry VI. says:

Photo by R. B. Whyte.

Rhododendrons at Temple Show, London, England.

Photo by R. B. Whyte.

At the Temple Show, London, England.

"SUFFOLK: Within the Temple Hall we are too loud; the garden here is more convenient.

"PLANTAGENET: Let him that is a true born gentleman and stands upon the honour of his birth, if he supposes that I have pleaded truth, from off the briar pluck a white rose with me.

"SOMERSET: Let him that is no coward nor no flatterer, but dare maintain the party of the truth, pluck a red rose from off this thorn with me.

"WARWICK: This brawl to-day grown in this faction in the Temple Garden shall send between the red rose and the white a thousand souls to death and deadly night."

That war waged from 1455 to 1485, and many thousands of Englishmen were sent to "death and deadly night." The Temple Garden is now known to horticulturists as the place in which the Royal Horticultural Society holds its principal spring show. It fulfils the function performed by our Horticultural Societies and the horticultural branch of our Department of Agriculture. In England the Government gives no assistance to Horticulture.

In the garden there is a large piece of grass upon which the Society pitch their tents and hold their shows. They had five tents, and these were filled to overflowing, many of the exhibits being placed in the open. There is a great difference between that show and those held in this country. There they have no competitive shows, and practically all who enter for exhibition are professionals who are interested in pushing their own particular lines.

The space allowed for exhibit is divided among the different applicants; for instance, a firm will apply for so many feet of space. They show just what they choose. There is no limit to quantity or to the arrangement of their shows within the space allotted. All the exhibits of flowers were scattered throughout the different tents, with the exception of orchids, which were kept all together. The show was held for 3 days, beginning at midday. The first day the admission was 10 shillings, about $2.50 of our money. The next day members and ticket-holders only could get in from 7 o'clock in the morning till noon. I never expected to see so many there when I wandered in about half past seven, but the tents were pretty well filled. Thousands of people attended and took a particular interest in everything. I was as much interested in the people as in the flowers, as it was a surprise to me to see so many of the visitors taking notes of the various exhibits and intelligently discussing the merits of the different flowers. If anyone goes to our leading exhibitions he will not see one in a hundred taking such interest in the flowers and fruits exhibited. We frequently hear that the Englishman is slow in business and not as keen as we are on this side. So far as the Horticultural firms are concerned, I can say that they are as sharp business men as I have ever met. The different firms there had their clerks at the shows taking down orders just as fast as they could write them. I saw a nice collection of Dahlias and some fine Sweet Peas that had been grown in the greenhouse. These were grown specially for the show in order to get orders from people before planting time. The perennials and May-flowering tulips made a magnificent show; of the latter there were some very large exhibits by the tulip growers. You may think it strange that these people should be spoken of as growers of tulips. I may tell you that the English and Irish growers are now very much ahead of the Dutch tulip growers for May-flowering ones.

At this show one of the most gorgeous sights was the Orchid exhibit. There were more there than would fill this room three times over; one exhibitor had enough to almost fill this room. Colonel Holford is one of the leading orchid growers in England, and has a most intimate knowledge of them, and the hour I spent with him going over his flowers very much impresed me with the intimate knowledge he had of orchids under cultivation. He

Double White Poppies.

Photo from R. B. Whyte.

evidently knew as much about them as any practical gardener could know. He has originated a number of new varieties. Colonel Holford and Sir J. Coleman are two of the biggest amateur growers in England.

At that show I saw some Rhodendrons which were most beautiful. The Clematis also were very fine. I made a list of about a dozen which I considered the best, they are: Fairy Queen, pale mauve; Mrs. Hope, lilac; Marie Boiselot, white; Nellie Moser, lavender with dark centre; Henryii, white; King Edward, mauve; Languinosa candida, bluish-white; Lord Neville, purple, very fine; Lady C. Neville, mauve and lavender; Belle of Woking, double, pale lavender; Mrs. George Jackman, white; Jackmanii alba, double white.

Some of the tuberous begonias at the Temple Show had large double flowers at least 5 inches across, pinks, yellows and whites.

The Malmaison Carnations were larger, finer colored and more highly perfumed than the American ones. They were shown on very long stems, generally about 25 in a vase, well spread out and with asparagus foliage in between. T. S. Ware had a large vase of Enchantress carnations with pale blue larkspur mixed in between, which made a very effective display.

There were also some fine sweet peas at this show. They were particularly well grown, with large flowers on long stems. Besides these there were Calceolarias and Gloxinias in wonderful profusion and all very beautiful.

The rose show contained magnificent specimens of Mrs. John Laing, and Frau Karl Druschki. Some of the specimens I saw were from 5 to 6 inches across, and excellent flowers. One way they grow roses which is very different from anything we can do here is in tree form or standards. Frau Karl Druschki shown in this form looked very beautiful with the branches hanging down. Some of these plants must have had at least 100 flowers on them, and it certainly is a most beautiful way of showing growing roses. They grow Ramblers in the same way instead of training them up the walls. One of the best of these is Lady Gay, a little, double, pink rose, about 1½ inches across. The roses on the trees were so numerous that the green of the foliage was almost hidden. Other very fine varieties which were shown there were Dorothy Perkins, Minnehaha and a new and very beautiful rose, Tausendschon.

Another plant they grow there in great profusion and which made a most beautiful display is Iris Hispanica. There are very few of these flowers grown in Ontario, but over there they grow by the acre. I saw it everywhere, in the shows and in the shop windows in great profusion and they must have grown it in very large quantities in the neighbourhood of London. The variety used was chiefly yellow, and it was sold in millions and at a low price.

The most interesting things there were the rock plants, such as Veronicas, Anemones, Saxifragas, and Thymes. At the exhibition the crowds were always to be found about the displays where they had a lot of these. A rock garden in England is very different from what we have here. A rockery with us is chiefly a pile of stones covered with foliage for about 10 or 12 feet. I saw rockeries there which were more than five acres in extent. Every person who has a garden of any size has one.

I saw a display of 100 kinds of apples in good preservation on May 27 and all grown in England. We could not get such an exhibit here at that time of year. The bulk of them were strictly English varieties. These apples were exhibited by the firm which had kept them in a fruit house and not in cold storage.

In addition to the Temple Show, the great show of England, the Royal Horticultural Society have a building of their own, where they hold an

Purple Rudbeckia.

Photo by R. B. Whyte.

exhibition every two weeks. They were not on anything like as large a scale as at the Temple, but they were more interesting and more useful, as it was difficult to understand and see everything in such a tremendous show as the Temple. At the first show of the R.H.S., the exhibits were chiefly Orchids, Rock plants, Perennials, Delphiniums, and Pyrethrum. Pyrethrum grows there to very much greater perfection than with us. They have some very beautiful ones. I have tried several times to get the named varieties out from England, but have never succeeded, as they have always been dead when I got them and I have had to be satisfied with what I could grow from seed, and while I have sometimes got good flowers, the great majority of the seedlings are worthless.

In Delphiniums also I saw some magnificent plants. That is another thing they are very much ahead of us in. I have seen some good Delphiniums in this country, but the very best I have seen were very inferior to those I saw in England.

In connection with the Royal Horticultural Society there is a committee whose duty it is to examine new things and to award certificates. If this committee thinks an introduction worthy they give it an "F.C.C." certificate, which is much sought after, as when a nurseyman puts an "F.C.C." ticket on his goods it means getting a higher price for them.

The Lupines, were most beautiful shades of white and pink and yellow. There were great masses of them and they were very effective and beautiful. Of Cannas there was a good show, the plants having been forced. Some of the Fuchsias were nine feet high and from three to four feet across. I saw bigger ones later on at Glasgow Botanical Gardens, where some were nearly fifteen feet high.

At this show I saw the first Oriental Poppies of the season. The pinks were the most popular, the salmon pinks being very beautiful. At the second show, on June 23rd, Paeonies were a leading feature. I went over the exhibits very carefully and noted the names of every paeony which I considered to be really good. (Those names appear in a list published elsewhere in this Report.)

Another plant I saw there, which we do not grow to anything like the same extent, was the Ivy Geranium. It is by far the most beautiful plant of that type to grow for window boxes. I noticed the windows decorated with boxes of Ivy Geraniums, and they were a mass of bloom. I asked one of our Canadian florists why he did not grow them. He said it was because we cannot get the bloom on them. It is a pity, because the window boxes I saw were a long way ahead of anything I have seen in this country. Every flower store and window there have some Ivy Geraniums, the pink being the most popular.

At this show there was a magnificent collection of Irises. Some beautiful specimens of Orientalis Superba, yellow and white, and longipetala, lavender and yellow were here exhibited. These are both very beautiful flowers and well worth growing.

I was at the Franco-British Show on June 24th. It was a great exhibition, and the outdoor Horticultural display was very interesting. The space was divided among some of the big firms and was laid out in flower beds and shrubs planted in between.

I attended the special flower show in the Music Hall. This was open to both French and English growers, and there were some very fine exhibits of paeonies and cannas and sweet peas. Here I saw these at their best. They do not show Sweet Peas all bunched up as we do, but keep each spike separate, and they go to a lot of trouble in doing so. The average length of

Oriental Poppies.

Photo by R. B. Whyte

the stems there was about ten inches, with as many as five flowers on some of them. The vases in which they were shown were about 12 or 14 inches in length, and were sometimes of tin painted green, and sometimes glass. They were all tall so that the spikes could be spread out well. Some of the best exhibitors mixed Gypsophila—or Baby's Breath—with the peas. The quantity shown was enormous.

The French and English exhibits of strawberries, also, were wonderful they were not shown in boxes such as we use here, but were nicely put up in flat cases and laid either on moss or strawberry foliage. Some of the berries were as big as an average Fameuse apple. I had no idea they were so much superior in size and quality, and the quantity they grow per acre is stupendous. One man told me that he picked 50 tons—that is 112,000 boxes—in one day, and that he picked that quantity several times during the season.

The next place I attended was the Holland House Show. This was held right in the heart of the City of London. This and the Temple are the two greatest exhibitions of the year in England. The Holland House Show is on a much larger scale than that at the Temple; in fact there were so many exhibits that some of them had to be put outside.

Here I made a list of what I considered to be the best Sweet Peas of each colour. It is a very difficult thing in a collection of, say, 100 or 150 kinds of Sweet Peas to put accurate names to the colours. My descriptions may possibly not harmonize with the catalogues, but the colours I have given were as they appeared to me.

In White there are four very fine ones, viz., Norah Unwin, Dora Eckford, White Spencer, and Etta Dyke. These were very much better than any of the older whites.

In Primrose, I have Mrs. Collier and Primrose Spencer. On the whole, I think Mrs. Collier is the better. A very beautiful combination which I call primrose and pink, which was a mixture of these two colours, was very attractive. The best of these were: C. W. Breadmore, Dora Breadmore and Evelyn Hemus. These are three of the very best of the Sweet Peas I saw.

In Blush, Elsie Herbert, Mrs. H. Sykes, and M. A. Lindsay were the best.

Of what I call Pure Pink, the best were Paradise (this came out about 3 years ago), Enchantress—said to be about the same colour, and it certainly was very close to it, Audrey Crier, Olive Ruffell, and Princess Victoria.

Among Salmon-pink: Constance Oliver, Nell Gwynne, Sutton's Queen, and Queen of Spain were the best. There were several others very fine, but these four are all new. Sutton's Queen was very beautiful: in fact, the most beautiful sweet pea I ever saw. It was a lovely shade of pink, large, and grew 4 to 5 flowers on a stem, and very fine long stems.

In Rose: Miss Willmott, Millie Maslin, George Herbert, and Lady Farren were the best.

Rosy-red: Mrs. E. W. King—a new one—was one of the best.

Lavender: Doris Clayton, F. Dolby, Lady G. Hamilton.

Mauve: The Marquis and Mrs. Walter Wright.

Orange: Helen Lewis and Henry Eckford, and a new one, St. George, which was a very brilliant orange tinged with red, with perhaps a little more red than orange, was very striking.

Scarlet and Crimson: Queen Alexander, George Stark, and King Edward.

Maroon: Black Knight.

There was a great display of Delphiniums.

In Perry's exhibit there was a little lake in which were water lilies of various colours with foliage growing, or apparently growing, the whole making a beautiful water garden. That exhibit must have cost him a great many hundred dollars, but he no doubt considered it a good investment.

At the National Rose Show, at Regent Park, was a large exhibit of roses of every imaginable description and every possible combination of colours and classes to suit everybody's taste. It is different from the Royal Horticultural Society in being a competitive show. Prizes are offered for certain definite quantities and classes. When they ask for 24 kinds of roses they do not separate into different kinds but show Hybrid Perpetuals and Hybrid Teas all together. By far the largest proportion were Hybrid Teas. One very effective display was in the class in which they asked for 12 roses of J. B. Clarke, a brilliant red,and 12 of Frau Karl Druschki—pure white. In this class there were 7 entries, all shown in boxes 3 ft by 1½ ft. These roses were set in moss and arranged alternately red and white. Karl Druschki was the most beautiful white there and contrasted well with the brilliant red, which was very beautiful.

To make as large a competition as possible they had about 80 classes, some for professionals, others for amateurs. Those who did not grow less than 2,000 plants had a class by themselves; those who grew less than 2,000; those who grew under 1,000; and those who grew under 200. Anybody who grew less than 200 rose bushes was not considered; so you can have some idea of the extent of rose growing in England.

My remarks on this subject would be incomplete without a reference to the wild flowers of the country and how they compare with ours. When I came to compare theirs with ours, we are much ahead of the English woods in wild flowers, not only in variety but also in beauty. I had to travel a great many miles in the country about London, and my attention was everywhere attracted by the very brilliant yellow bloom all along the railroad, and all through the country the prevailing colour in the month of May was yellow. Here, our yellows come in the fall, with our Golden Rods and Rudbeckias, but in England the prevailing colour in May and June is yellow.

Of all the wild flowers I saw there the Blue Hyacinth is the best. It is a blue of the most beautiful shade and has a pleasant perfume. It is very much like our Roman Hyacinth in shape but is a little taller. I was a little too late to see the Primrose at its best, but from what I saw of it it must be a very attractive feature in the landscape in its season. The yellow Gorse also took my attention with its most brilliant, gorgeous yellow colour, and great masses of it; but all its beauty is in its flowers as it has most disagreeable prickles and thorns.

Another yellow flower, called Broom, is also a very beautiful shrub which grew in great abundance everywhere. The Hawthorn is not nearly as common throughout the country as I had expected to find it and the trees were not any better than ours here.

Another yellow flower was the Laburnum, the most beautiful small tree I ever saw. It grows about the size of our Rowan Tree, the clusters of flowers hanging in great profusion.

These are really all the spring wild flowers of any consequence that I saw in England. In the woods, particularly in the South of Scotland, I could not find anything which would take the place of our Hepaticas, Spring Beauties, Dog-tooth Violets, Bellworts, Squirrel Corn, and Trilliums.

Money and skill, and the experience and care of centuries have given

to the landscape picture a "finish" which produces an agreeable serenity as the eye takes in the changing scenes when journeying through the country—and one is impressed, and still more impressed by the everywhere evident—I might say national—love and appreciation of the beautiful in nature.

A few centuries hence Canada may boast of some such National characteristic. It is our duty to plan for that future and to inculcate in the children of to-day, to be continued and developed in the generations to come, that love for and appreciation of the beautiful and refined, not only in the Arts and Sciences, but also in Horticulture, with the ultimate object "Beautiful Canada."

Mr. Whyte, in answer to a question as to Rhododendrons, spoke as follows: They grew there to a profusion, beauty and quality we do not know anything about here. I saw probably the finest show of these ever seen in the world, such variety, beauty of color, and shape, and wonderful perfume. You could see big bushes five, six, seven and eight feet high. It is a plant we cannot grow here. There were a great many of these at the Temple Gardens. The outside shows there was almost as large as the one inside flowers, shrubs and trees being shown out of doors. There was also another thing in connection with the exhibit, they grow goose-berries in the tree form. It is a very interesting thing to see them on a tree six feet high.

A. McNeil: Mr. Whyte has given us a splendid talk as to the larger gardens. Could he tell us as to the extent to which horticulture is engaged in by the laboring classes? Very small gardens, I think, are what we would be specially interested in.

R. B. Whyte: Gardens are universal. Every body wants one. One of the first things I noticed after leaving Liverpool was a large market garden, where everything was in small quantities, and there was a path around each plot, and I afterwards found out these were workmen's gardens, and in one thousand small towns they had on the out-skirts a large field divided up into these little gardens that were worked by the working people in the city. They pay a small sum for the use of this land, and cultivate it for their own benefit. Whatever road you travel out of London, you will see at the back of the houses, and in front, little flower gardens that are perfect pictures with great clumps of lilies and roses. You will see beautiful roses like Mrs. John Lang, and nearly every gate is covered with climbing roses, and they use the very best kinds such as the Carl Druschki. These are the roses that grow around workmen's houses. I do not recollect a single railway station that I passed that had not a flower garden with roses growing over the fences and up the walls. Wherever there was a place to grow anything there were roses.

THE CIVIC IMPROVEMENT MOVEMENT IN ONTARIO.

By H. L. Hutt, O.A.C., Guelph.

It is very evident to those who travel, or even to those who merely read the papers, that a strong movement has set in on this continent for civic and rural improvement. Just what it may result in, it is impossible to say at present; but it is safe to predict that the movement is going to have a marked effect on the appearance and character of our country generally.

Its Origin.

The civic improvement has been the outcome of a growing appreciation of art, and a desire for real beauty, which has resulted from the prosperity of the times and the tendency to travel. Its origin might, no doubt, be traced to Europe, where many of the towns and cities have become centres of attraction for American tourists. From the old land we have learned much and have still much to learn. European travellers always speak with delight of the architectural and landscape beauties of Paris, Brussels, Vienna, and Edinburgh.

Just when and where the civic improvement movement first made its appearance here cannot be stated definitely, but like many other movements, some good, and others not so good, its effects were first seen in the country to the south of us. The Town of Stockbridge, Mass., claims the

The planting and care of trees on the streets of every village, town and city should be under the management of a Park Board or Commission, which can adopt a definite plan for the planting of trees on streets, and see that they are properly cared for. This is the result under such management on Vansittart Avenue, Woodstock.

honor of having, nearly fifty years ago, the first organization having for its object the preservation of natural beauties and the general improvement of the village surroundings. In later years many organizations having similar aims have been formed in various parts of the country, but the one which has been the most active in giving a national impetus to the civic improvement movement has been the American Civic Association. This was formed in 1904, by the union of two associations which had for years been working along somewhat the same lines, viz., "The American Park and Outdoor Art Association" and "The American League for Civic Improvement." The new organization was said at the time to represent four hundred and eighty local improvement societies.

Mr. J. Horace McFarland, whom many of us had the pleasure of hearing at some of our local society meetings last spring, has been president of

the new association since its formation, and he has by judicious use of the press kept the work of the association prominently before the people of the whole continent. There are at present twenty-two members of the American Civic Association in Canada. These are scattered here and there from Halifax to Calgary. In this connection, I may say I think it would pay all of our Canadian Horticultural Societies to get in as close touch as possible with this progressive national association, and make the work, at least, if not the organization, international in character. Our Superintendent, Mr. J. Lockie Wilson, and I expect to attend the annual meeting of the American Civic Association to be held in Pittsburg, P.A., next week, and we hope to get many pointers that may help us in furthering the work in this country.

The organization of our Provincial Horticultural Association three years ago was in itself a result of the influence of the American Association

Galt has made more progress in park making than any town of its size. May this not be due to some extent to the attractive surroundings of the Collegiate Institute, at which many of Galt's leading citizens have been educated?

formed a year or two previous. For it was felt that we should have a Canadian organization with similar unselfish aims.

Attending this convention, we have delegates from a large number of the sixty local Horticultural Societies already formed in this Province, all interested in promoting local civic and rural improvement. It should be the duty, therefore, of this Association to take the lead in assisting, directing and promoting such movements in all parts of the country. We have a big field for operations, and a splendid work to do.

The Aim and Object of the Movement.

The aim of the civic improvement movement, put in a nutshell, is for "A better and more beautiful America." The scope of this improvement may be inferred from an enumeration of the departments of work under-

taken by the American Civic Association. These are fifteen in number, with a Vice-President at the head of each department, and include:—Arts and Crafts, Women's Outdoor Art League, Children's Gardens, School Extension, City Making, Factory Betterment, Libraries, Outdoor Art, Parks and Reservations, Public Nuisances, Public Recreation, Railroad Improvements, Rural Improvements, Social Settlement, and the Press.

One of the strong features of the work of the American Civic Association has been its use of the press in educating public sentiment and spreading abroad information regarding what has been accomplished in different places and what may be done in others.

In Ontario we need not at present undertake so many kinds of work, but I think it would be well for us to begin at once to concentrate our efforts on a few lines which need most attention at present. To this end, I would

The removal of street fences is an indication of the progressiveness of a town or village. The town of Leamington has many such indications of progressive spirit.

suggest that our association appoint committees or departments this year to deal with such problems as:—

1. The Improvement of Home Surroundings.
2. The Improvement of School Grounds.
3. Care and management of streets and boulevards.
4. Establishment of Parks and Playgrounds.
5. Abatement of Public Nuisances.
6. Promoting Rural Improvement.
7. The Press.

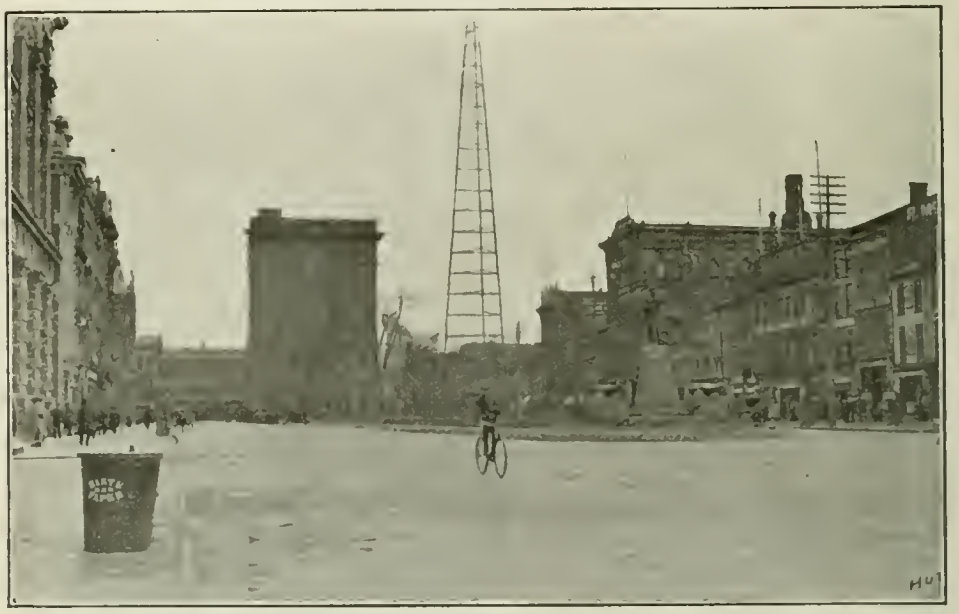
Many others might be added, but this would make a good beginning. If the right person were put at the head of each committee and work was begun at once, this association would make itself a power for good in the country, and we should have valuable reports from each at our next meeting.

Evidences of Progress in Ontario.

As a matter of encouragement to those who may be looking for more rapid changes, it may be well to call attention to the steady and even rapid progress that is being made in many parts of the Province. There have been a number of agencies contributing to this progress which may be used to still greater purpose in the future:—

1. The more general use of cement in the making of pavements and sidewalks has had a marked effect on almost every town and village in the country. In many Ontario towns cement has almost entirely replaced the old wooden walks during the past ten years.

2. Accompanying the laying of permanent walks has come the removal of street fences. In many up-to-date Ontario towns and cities we may now



Gore Park, Hamilton, is a delightful oasis in the heart of the city. Such places afford suitable sites for drinking fountains and commemorative statuary.

go black after block on the residential streets and see no fences, either in front or between lots.

3. Immediately following the removal of fences has come the proper grading of the lawns and boulevards to the line of the pavement, and more attention to keeping the grass nicely cut.

A prominent citizen of Woodstock told me that it was not many years ago that he owned the only lawn mower in the town. Now it would be hard to find the citizen who did not own and use one regularly.

4. In some places where systematic tree planting has been done along the boulevards, there are now fine avenues of street trees. But just here is where so many towns have been spoiled because the street planting has been left to the individual property owners, no two of whom have the same idea of what kind of trees should be planted, or where they should be placed on the boulevard. This has rendered it impossible to make a uniform continuous row of trees, because of the great variety selected and the haphazard method of their arrangement.

The street planting and care of the trees in every village, town and city should be under the management of a Park Board or Commission, which can adopt a definite plan for the regular planting of certain kinds of trees on certain streets and will see that they are properly cared for.

5. In a number of our cities and most progressive towns, Park Boards or Commissions have been appointed, as provided for by the Ontario Parks Act. This means that much greater progress will be made in such towns, and other places will wake up to the necessity of similar action.

Within the last few years many of our Ontario towns and villages, to say nothing of the larger cities, have seen the advisability of making park reservations, and have purchased lands for park purposes. In some cases, the development of these has been undertaken by the town council, and in others by a Park Board; but experience has proved that greater continuity

The St. Catharines Carnegie Library. Artistic public buildings of this kind amid beautiful surroundings add to the dignity of towns and cities.

of action may be expected from a Board or Commission which is more or less permanent.

Evidences of progress in the establishment of parks may be seen in such places as Ottawa, Brockville, Havelock, Toronto, Brampton, Hamilton, Galt, Guelph, Berlin, Waterloo, Woodstock, Stratford, Barrie, Orillia, London, Leamington, and no doubt many other places which I cannot now mention.

For a town of its size, I know of no place making greater progress in the establishment of beautiful parks than Galt. It has now three good sized parks, and seven or eight small plots and squares about the town, which help to make Galt beautiful.

In some places, the local Board of Trade has taken the initiative in promoting civic improvement, because they realize the fact that beautiful surroundings are a potent factor in attracting citizens and increasing trade.

The Orillia Board of Trade a couple of years ago published a neat little booklet encouraging the citizens to unite in making Orillia an attractive spot for summer visitors.

From the "Ottawa Citizen," we clip the following: "The people of Ottawa are taking an increasing pride in the appearance of the Federal Capital, which the Dominion Government has also done so much to beautify. Ten years ago there was only one park in Ottawa, and most of the private residences were walled in by high fences: now there are seven parks, nearly all the fences have been taken down, so that gardens and lawns are open to the street, and those having available grounds for the purpose are planting them with flowers and shrubs, and generally adding to the beauty not only of the premises but of the locality." And so the improvement is going on steadily in many parts of the country.

A railway station and its surroundings should be made attractive. Through it our impressions of a place are formed. American Railway Corporations have made many of their station grounds veritable beauty spots.

The Relation of the Horticultural Society to Civic Improvement.

In some places the local Horticultural Societies have taken an active part in promoting civic and rural improvement, particularly along horticultural lines. In other places the work has been confined too much to a few special features of improvement, such as floriculture or window gardening. Such societies should be encouraged to reach out and take a broader view of their opportunities. I would suggest the following as a few of the avenues through which the local societies might work to good advantage in promoting improvement in their respective communities.

1. By conducting an educative campaign in awakening public interest to an appreciation of the value of neatness, order, and beautiful surroundings. To this end it is well to make good use of the local press.

2. By enlisting the support of the rising generation by flower competitions, and also by making school as well as home surroundings as beautiful as possible. Young people brought up amid beautiful surroundings may be counted on in later years to work for rural and civic improvement wherever they may be placed. I am looking forward to an early awakening of School Boards to the importance of improving school grounds, and have prepared a bulletin on that subject for the Educational Department this year.

3. By seeking the co-operation of other influential local organizations, such as the Town Council, Board of Trade, or School Board, which may be willing to assist in making local improvements. In union is strength.

4. By working for the appointment of progressive local Park Boards or Commissions, and urging such Boards to get possession of suitable lands

The angles made by converging streets often afford excellent opportunity for making beautiful resting spots. Galt has a number of these. How long will towns and cities tolerate the disfigurement of streets by unsightly telegraph and telephone lines which might be readily placed underground?

for park purposes while they are cheap. Plans can then be adopted for their gradual development and improvement.

The Ontario Parks Act provides that one-half mill on the assessment may be used by any Park Board so appointed for such purposes. And whenever such money is judiciously expended, the increased value of adjacent lands will soon pay a good share of the cost of such improvements in increased revenue from taxes.

The Park Board in any town might also be asked to establish a small nursery, where trees, shrubs, and vines could be grown in quantity for civic improvement work, and could be supplied to the citizens at cost for planting in their own grounds.

5. Every property holder should be encouraged by precept and example to contribute his share to the general improvement of the place by making his own lot as attractive as possible. If every citzen did his share, what a change would take place in the appearance of our country. Tourists from all over the world would come to see Beautiful Ontario.

Legislation Desired.

There are a few things upon which it would be desirable to have some legislation in this country, and which this Association might be instrumental in getting, if it were to join forces with other organizations which have been asking for the same:—

1. Legislation to control the bill board nuisance and advertising monstrosities which disfigure architectural beauty as well as natural scenery.

2. To prohibit the butchery of street and roadside trees by telephone and telegraph companies, and compel the placing of their wires underground wherever they enter town or city limits.

3. To prevent dogs running at large within town or city limits.

There may be room for diversity of opinion upon all of these questions, but there can be no two opinions about it, that dogs and bill boards and unsightly telegraph and telephone poles are at enmity with civic improvement.

The Chairman: We have been all very much interested in the paper read by Professor Hutt, and also in the lantern slides. I am sure everybody was very much interested, and if we could have these scenes reproduced before the people of the Province, I am sure they would have wondrous results.

A vote of thanks was then passed to Hon. Mr. Duff for being present and taking the chair.

SECOND DAY—MORNING SESSION.

At the morning session on the second day the President, Major Snelgrove, occupied the chair, and called for the presentation of the Directors' report.

DIRECTORS' REPORT.

Your Board of Directors desire to report that during the year, two directors' and two executive committee meetings were held. At the first meeting held after the conclusion of the last annual convention, arrangements were made to petition the Ontario Department of Agriculture to amend the Horticultural Societies Act in accordance with the resolution passed at the last annual convention of this Association. This petition was duly presented. As you have been informed already by our Superintendent, the requests it contained were duly granted by the Government.

At an executive meeting held in Toronto at the time of the Exhibition in September, 1908, the programme for this convention was prepared.

At a meeting of the executive committee, held November 9, 1908, and at a directors' meeting held November 10, 1908, it was decided to make the following recommendations to this convention and to the incoming board of directors:—

1st. That application be made to the Ontario Government for the renewal of the annual grant of $100 to this Association, promised and made in 1906 by Hon. Mr. Monteith, Minister of Agriculture, which grant, owing to an oversight, was not made to this Association during the year 1907-8.

2nd. That whereas the membership of the Horticultural Societies of the province during the year just passed has increased by approximately one-third, or over 2,000 members, imposing greatly increased expense upon the individual societies of the Province, and as the provisions of the Horticultural Societies Act, as adopted by the Government, were designed with the object of encouraging societies to increase their membership and usefulness, it is recommended that a deputation be appointed to wait on the Government to ask in person, and by formal written petition, that the annual grant to the Horticultural Societies of the Province be increased by at least $2,000 a year.

3rd. That the officers of this Association as now constituted shall include a secretary and a treasurer only, instead of two secretaries and a treasurer as at present.

4th. That the constitution of this Association be printed in full each year on the programmes for the annual convention, as well as a statement showing the divisions of the province for which directors are elected each year.

5th. That such steps as may be necessary shall be taken to ensure this Association being represented on the Boards of Directors of the Ontario Horticultural Exhibition and of The Canadian National Exhibition, and that the new Board of Directors be empowered to appoint such representatives.

6th. That the Superintendent of Horticultural Societies and the Department of Agriculture be formally congratulated on the splendid annual report published for this Association this year, and that we recommend that in future reports the names of the persons whose homes and gardens are illustrated in such report be published in the report. It is further recommended that enough of these reports be printed each year to enable copies to be mailed to all the members of all the horticultural societies in the Province.

7th. That steps be taken to secure such legislation as may be necessary to enable municipalities to impose a tax on bill boards, and that the municipalities of the province be encouraged to impose a heavy tax on such bill boards so as to promote the movement that is under way all over the continent looking for the removal of these unsightly nuisances.

All of which is respectfully submitted, signed on behalf of the Board of Directors by,

H. J. Snelgrove,
President.

H. B. Cowan,
Secretary.

November 11, 1908.

Moved by Rev. Mr. Scott, seconded by Mr. Diamond. that the report of the Directors for 1908 be received and adopted. Carried.

REPORT OF THE COMMITTEE APPOINTED BY THE CONVENTION OF THE HORTICULTURAL ASSOCIATION OF ONTARIO, NOV., 1907, ON THE INCORPORATION OF HORTICULTURAL TOPICS IN THE NEW SERIES OF SCHOOL BOOKS.

The matter in hand was considered at some length a year ago, and was the outcome of a submission in one of the papers read at the Convention of 1907.

In that contribution the concern of thoughtful men was expressed that if the present school books of the Province are to be changed, the new ones should have a conspicuous place for the first enterprise of the nation. It was stated, further, that one of the most important services that could be rendered by Government and people in this generation would be the training of our children into appreciation of the Creator's gifts in the soil, and in the best use of that gift both for the development of a sturdy Canadian manhood, and for the enlightened projection of the country's chief resource.

Your committee was asked to put itself in communication with the Government of the Province at an early day with a view to securing the introduction of the Horticultural features desired by the Association into the proposed new series of school books.

The first communication your committee received was from the office of the Prime Minister and President of the Council, acknowledging the receipt of our committee's first correspondence, and stating that the Minister of Education would take the matter into consideration. Two days after the receipt of the letter from the Prime Minister, your committee had this additional letter from the Minister of Education:

TORONTO, March 6th, 1908.

DEAR SIR,—I am in receipt of your letter, as also one written to the Hon. Mr. Whitney, and shall be pleased to consider the matters presented.

Many thanks for the trouble you have taken. I trust the result will be satisfactory.

Sincerely yours,

(Signed) R. A. PYNE,

Minister of Education

A fortnight later we had a second letter from the Department of Education, in terms following:—

TORONTO, March 19th, 1908.

DEAR SIR,—I am directed by the Minister of Education to state, in reply to your letter of recent date, that the object of the new Readers will be to teach reading. It would be impossible to include in them special courses in different departments. An effort will be made in the selection of the topics to foster a love for nature, but instruction in the subject in the school programme will be provided for elsewhere. It may be seen during the present Session of the Legislature, when the Minister unfolds his policy, what steps are to be taken to secure effectively the purpose the Ontario Horticultural Association has in view.

I have the honor to remain,

Your obedient servant,

(Signed) A. H. U. COLQUHOUN,

Deputy Minister of Education.

Your committee recognize with the Deputy Minister of Education, that the object of the new readers should be "to teach reading." But the aim of this Association is to co-operate with the Department of Education in finishing such matter along horticultural lines as will so far improve the kind of reading, that the instructors of the rising generation may become

Victoria Park, London.

Photo by I. S. Pearce.

increasingly conversant with topics, which in our judgment are of special importance at this particular period of our national record making.

Probably no land under the sun has such substantial attractions to offer to the European and the American who are seeking a change of location as we have in Canada. Probably no country on either hemisphere is making a stronger bid to the man and his family belonging to another clime to come over and abide with us in our great Dominion. Multitudes, with particular inclinations and qualifications have yielded to our solicitations, have come to us, and have found no occasion to question the fairness of our advances to them. But the fact is, nevertheless, that thousands have come and have been sent back to the places where the came. And why? Because of their incompetency to handle the soil. Now, what are we doing in Canada, and more especially because of our favored situation and circumstances, what are we doing in Ontario to spread that intelligence among our own people which will make Canada's greatest asset, the soil, more engaging and more remunerative to the Canadian commonwealth?

The Ontario Horticultural Association is encouraging its own members, and also the official powers that the people of Ontario have created and established, to utilize the agencies within our reach for the most advantageous handling of our principal source of pleasure and revenue. We are not now dealing with the detail of a school book heading, we are aiming rather at a specific trench. And inasmuch as Provincial appropriations are turned into Educational directions your committee recommends that this Horticultural Association shall re-emphasize its conviction expressed a year ago, and repeat its former request that through the influential agency of the new school book series, which is expected to be of lasting educational value to a large proportion of the people of this young and promising country, particular care should be taken to enhance the interest of our citizenship in the landscape, the garden, and the field.

All of which is respectfully submitted,

(Signed)

A. H. Scott, (Rev.),

Chairman.

W. B. Burgoyne,

J. S. Pearce.

Moved by Mr. Cavers, seconded by Mr. Short, "That the report just read be received and adopted." In moving the motion, Mr. Cavers said, "I desire to compliment the committee, especially on having sufficient moral courage not to accept the dictum—I use the word respectfully—of the Educational Department that the new books were intended to teach reading. The committee very properly draws attention to the fact that the kind of reading is a very important matter. I sympathize entirely and appreciate the sentiment expressed in the report, and I hope the recommendation made at the end of the report will be heartily adopted by the Convention, and that a similar committee be re-appointed to press the matter referring to the kind of reading that is to be embodied in the new books. The motion was carried.

Where Crystal Waters Fall.

TREASURER'S REPORT, 1907-8.

In presenting the following statement of the receipts and expenditures of the Ontario Horticultural Association for the year ending November 11, 1908, I regret to report that, owing to an oversight, the Department of Agriculture did not include the usual annual grant of $100 to this Association in the estimates for this year. Consequently, we did not receive the customary grant.

Receipts.		*Expenditures.*	
Balance from 1907	$ 86 10	Printing programmes, 1907 Convention	$ 8 35
Horticultural Society Fees: Oakville, Owen Sound, Perth, St. Catharines, Belleville, Hespeler, Ottawa, Stratford, Elmira, Cobourg, London, Seaforth, Kincardine, Hamilton, St. Thomas, Durham, Guelph, Woodstock	36 00	Refund London Hort'l Society fees, paid twice in error	2 00
Interest to Nov. 11th, 1908	2 75	Printing letter heads and envelopes	14 50
		Expenses W. B. Burgoyne attending Executive Committee meeting, September, 1907	3 60
		Exchange at Bank	10
		Balance on hand, Nov. 11, 1908	96 30
	$124 85		$124 85

Horticultural Society Fees for 1908-9 received during 1907-8:
Smith's Falls, Windsor, London, Hamilton, Kingston, Oakville, Cardinal, Walkerville, Brantford, Kincardine, Port Dover, Toronto, Springfield, Belleville, Thornbury, Goderich, Cobourg, Perth, Ottawa, Seaforth, Elmira, Bowmanville, Grimsby, Picton, Galt, Owen Sound, Clinton.

Total, 28 Societies ..... $ 56 00

Total amount on hand, Nov. 11th, 1908 ..... 152 30

H. B. Cowan,
Treasurer.

Audited and found correct.

A. O. Jeffery,
J. A. Ellis,
Auditors.

Upon motion the report was adopted.

The President: The office of corresponding secretary has been abolished, and in future we will have one secretary and one treasurer.

ELECTION OF OFFICERS.

The election of officers was then proceeded with and resulted as given on page 6.

AN INCREASED LEGISLATIVE GRANT.

W. B. Burgoyne: I hardly think it is necessary to go into this matter extensively, because it has been discussed by the Committee, and they have unanimously recommended that the Government be urged to increase the grant from $8,000 to an amount not less than $10,000. You have already endorsed the wisdom and necessity of this grant, and it is not necessary for

me to go into any argument to demonstrate to the Association the necessity for its increase. Yet there are some things that might be brought out, briefly, to show the wisdom of the present Act, and how it has worked out after an experience of two or three years. Prior to the present Act being introduced there was a condition that did not make for progress among Horticulturists. The Horticultural Grant was mixed up with the Agricultural Societies' Grant. If they were fortunate enough to be in a district where there were only two other societies besides themselves, they would receive $140, regardless of the fact that they might not have a membership of more than 50, the minimum required in cities; although I believe a smaller membership than that was allowable in towns and villages. If you will look at the last report of this Association, in which is tabulated the grants for 1906 and 1907, and the membership for these two years, you will see that in a city much larger than St. Catharines, where they had an Association with a membership of 53, they received a grant of $140, while the society in St. Catharines with a membership of 289 received $77. That was not a fair condition of affairs, and this Association recognized that, and the Department recognized it, and based the grant thereafter upon the work that was done by the various societies, and that has worked out, I think, even better than either the Department and officers of this Association could have imagined. Last year's returns did not show any very great increase in the total membership in the Province, but of those received this year by our Secretary, from 44 societies, 34 report an increase in membership and nine societies a decrease. But these decreases are very small. The increases are not confined to two large societies such as Ottawa and St. Catharines, where the increase is very large, but every society has enjoyed increases proportionately nearly as large as Ottawa. The society at Barrie increased from 67 to 132, or double their membership last year. The Village of Grimsby increased the membership in their society from 52 to 105, and Tillsonburg from 60 to 100. Woodstock increased 47; Strathroy 40, Galt from 160 to 206; making a total increase of 2,012 in 44 societies, or an increase in all societies of 45 per cent. We may very well congratulate ourselves that the Act has so worked out for the benefit of all societies in the Province. The expenditure has increased very largely, but not quite in the same proportion as the increase of membership; 28 societies report an increase of expenditure and 15 a decrease. The decreases are small, the increases large. The total net increase in expenditure of these societies is $33,230. These figures show most conclusively that the Act, as at the present framed, has worked out in the interests of the Horticultural Societies, and I think we are justified in asking for an increase even larger than 25 per cent, because the whole amount is not a serious thing for the Government of this Province, taking into consideration all the valuable work the societies are doing.

Mr. Whyte stated that they contemplated having branch societies, so that they may do work in the suburbs around Ottawa. In St. Catharines our membership is not confined to the city, as we have a considerable membership in Port Dalhousie, Merritton and Thorold. These members are doing work in the interest of the societies of this Province, and in the interest of the Horticultural work of this Province, and after these returns have been considered by the Department they should make a grant not exceeding $12,000, instead of $10,000.

MEMBERSHIP.

By J. F. Watson, Ottawa.

"The objects of our societies shall be to encourage the improvement of home and public grounds, by the planting of trees, shrubs and flowers, and otherwise promoting out-door art and public beauty."

Clearly, then, the Act incites us to increase our membership, since the more workers we enlist the greater will be the possibilities and probabilities of fulfilling the objects of our organization.

But, "How to increase membership?" is left to the Executive of each individual Society to answer. It is my privilege to tell you how the Ottawa Society answers that question, and I do so with pleasure, with the hope that my remarks may suggest to you methods whereby you may be ultimately successful in adding to your membership, and thus extending your influence for good.

The financial assistance proffered by the Ontario Government, under the provisions of the Act, was the incentive which aroused to greater activity a few enthusiastic horticulturists in Ottawa, and resulted in the organization of the Ottawa Society.

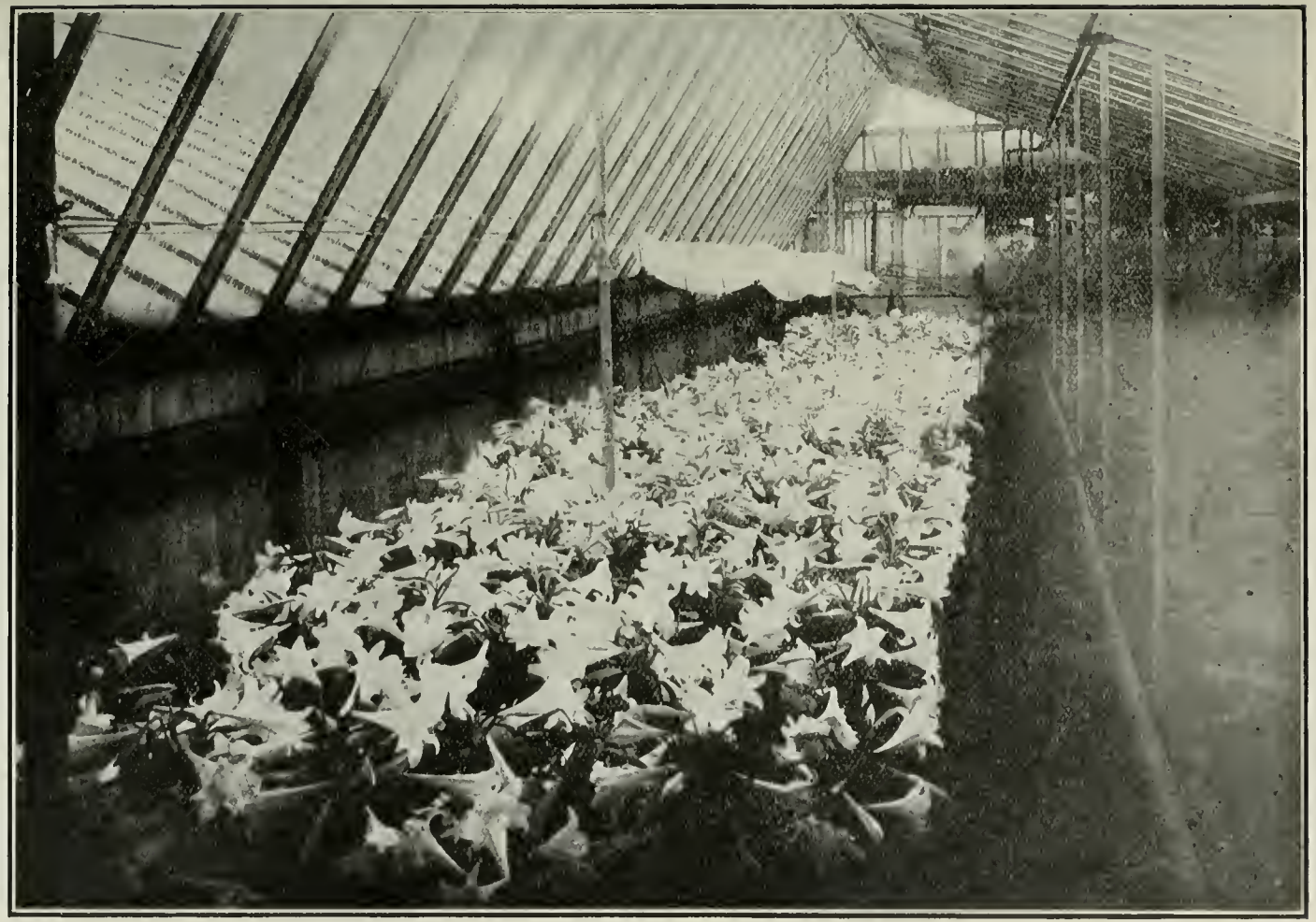
Financial assistance is necessary if we would successfully conduct the work of educating the public in horticulture, and financial assistance on a more stable basis than the erratic, voluntary contributions of the public. Permanency of revenue was offered by the Ontario Government, and with such assurance our Executive had confidence to plan for future work, and to appeal to the public for co-operation.

In the year of organization 117 persons were enrolled as members, and each subsequent year saw a small increase, but until 1907 no special effort was made to add to our numbers, for the reason that the Government grant being limited, it was not possible for us to carry a large number of members, and at the same time fully develop the work planned. But, with the revision of that Act was presented an opportunity for enlarging the scope of our work, with a knowledge that the greater the activity, the greater the reward, not only in increased Government grant, but also in an extended influence for good in the community.

The new Act is just what the Horticultural Societies were waiting for if we would fully serve the purpose of our establishment, and the very best thanks of the Horticultural Societies of the Province of Ontario are due to the Government for the careful consideration given to our case, and the liberal treatment accorded us in the most excellently framed instrument by which we are governed.

Shortly after its passage, our Executive held a meeting to consider the new provisions and the extent of their influence on our work. At that meeting, in summing up, our President said: "It is evident from the excellent provisions of this Act that the Department has spared neither pains nor time in its efforts to frame an instrument which will be really satisfactory and effective, and is in earnest in its desire to help the Horticultural Societies of the Province. We can best show our appreciation of this thoughtful consideration of our need by making a special effort this year to extend our influence, and that we can best do by increasing our membership roll."

The response was an assurance from the members of the Board of their hearty co-operation. Such a decision meant increased responsibilities for each individual of the Executive, and a further tax upon his time, but as agents of the Department, and having accepted the responsibilities delegated to them they felt it their privilege to respond to the call, and they did so,



Ready for Eastertide.

content in anticipation of the reward which springs from a consciousness of a proper discharge of duty.

The growing of flowers and the beautifying of the home grounds is so pleasurable that we come to look upon it as a recreation or fad to be enjoyed as the spirit moves us, and we are free from the restrictive bonds of business tenets. This should enable us the easier to interest people, and so it does; but, nevertheless, those same people when they become members of the society desire to be treated in a business-like way, to the extent that such premiums as are promised they want to get, and they want prompt attention to their calls for information and assistance. In short, it matters not how unbusiness-like the members themselves may be, they demand to be dealt with in anything but a loose manner. Therefore, it is essential that the Board of Directors treat the matter as a business proposition, and not a fad, to be conducted in the most convenient manner and with the expenditure of no more exertion than is absolutely necessary.

We, in Ottawa, are fortunate in having an Executive of enthusiastic and capable Horticulturists, and most fortunate in that they are busy men, as the busy man is the one who has time to do anything, and he does things, while the man who has plenty of leisure and a surfeit of good ideas talks, but does not work. The policy of our Board has always been to consider the whole matter of governing the Society as a business proposition, requiring serious thought and unrelaxing effort.

Every promise made in the annual announcement is faithfully fulfilled, and at the time stipulated. The public metings and exhibitions—which are held once each month from May to October—are opened punctually and conducted in a business-like manner. At exhibitions there is scope for the exercise of tact and judgment, before and after the judging, to impress upon the individual that he is an integral part of the whole, and that there are special privileges for none.

More particularly the Board's dealings with the Secretary are "strictly business." To him is left the responsibility of elaborating the policy of the Executive, and the carrying out of the details of their plans; they look to him for the successful conduct of the business details and to formulate a systematic plan of campaign for publicity, and largely to suggest the best methods of enrolling new members. While this work is left in the hands of the Secretary, every man on the Executive makes a point of covering the ground in his own immediate locality, and uses his best efforts to enlist the assistance of his own friends and acquaintances. This confidence and material support and co-operation of the Board is much appreciated by the Secretary, and is probably responsible for more results than might be expected.

In considering the question of how to increase the membership, the Secretary started with the theory that every worthy citizen would commend, and many actively encourage, any work making for the good of the community, and it was first necessary to make known the work and plans of the Society. For this assistance we turned to the press, since through that medium are suggestions carried into the family circle, and greater influence exerted than can possibly be obtained by printed matter in any other form. We know that what many deem their own judgment on daily topics is merely a reflection of what they have read in the newspapers. What reaches them for the first time in to-day's issue soon becomes their belief and knowledge. We had to give them that knowledge to strike a responsive chord.

The press of Ottawa has been most generous with us the past year, and has cheerfully published any matter that we have submitted.

We began our campaign in the newspapers with a good account of the annual meeting and followed up with occasional locals until towards spring,

An Ornamental Lawn.

when a specialty was made of short notes, and concluded with a grand finale of a full page "write-up" of the Society, illustrated with photographs of the Executive, of the special advertising referred to.

Early in the spring we commenced the publication in the press of short, crisp tit-bits, in heavy type, inserted in different parts of the paper, and continued at short intervals until well on in May. I quote two or three of such notices as example:

"Clean up and add to your pleasure and pride in your own house and grounds."

"Nothing looks worse in a fine city prospect than an ill-kept garden or un-kept lawn."

"Your share of beautifying Ottawa lies in your own property. It will add to its value, too, if you clean away the eyesores."

"Work for the cause of a clean and still more beautiful Capital."

Sometimes six or eight such notices were scattered in one issue, until several hundred appeared, so that what was passed over to-day was glanced at to-morrow, read the next day and became the original idea of the reader, thus fulfilling their object in making the people feel that they wanted us more than we wanted them. They prepared the way for the more aggressive work of canvassing, which was carried out untiringly by the Directors, by interested members, and by the Secretary.

During the summer there was a detailed write-up of 260 of the best gardens; also monthly, a full account of each meeting and exhibition with list of prize winners, and occasionally an editorial notice. In all, 65 columns of matter were published in the city newspapers during the year. How did we get the press interested? By showing them that we were in earnest in our efforts to serve the community. As the manager of one newspaper said: "They know a good thing when they see it."

One thousand and ten persons were enrolled as members of the Ottawa Horticultural Society for 1908, an increase of 663 over the previous year. But that increase was not got without a very considerable effort. It meant working, not one day a week, but for actually every day in the week from spring up to the close of the year, and now we start again for 1909. Still it would not have been possible to enroll so many members had it not been that we had a good cause; had we not built up a reputation on the good work of past years; had we not been organized on a sympathetic and business basis; and had we not a Board of Directors, keen, enthusiastic workers. Lastly, we could not have accomplished the work we did this year had the "Horticultural Societies' Act" contained the restrictive clause of the old Act, limiting each Society's grant—and which in effect said—"So far shall you go and no further."

By the elimination of that clause our field of labor is extended; there is an incentive for continued effort and greater activity in the direction of the betterment of living conditions; greater possibilities and probabilities of each in every Society fulfilling its objects and showing some good reason for its existence.

Increase the number of your members, and thus extend your influence, and do your share towards making Ontario the "Flower Garden of our Favored Land."

A. Dickson: What percentage of your members attend your meetings or take active part?

S. Short: About 2,500 people attended the several exhibitions.

J. M. Dickson: What percentage attend the meetings for discussions?

S. Short: 140 to 165. In addition to the lectures we have a flower show in June. A rose show attracts more.

GALT CIVIC IMPROVEMENT.

By J. P. Jaffray, Galt.

Coming from Galt, and representing the Horticultural Association, I may I say I am only an amateur, but as a member of the press, I have taken a deep interest in civic adornment. In 1896 I was secretary of the West Side Association of Chicago, a body of very aggressive men. During that time, I had it pumped into me that the best men in the community are advancing the town in which they live. The result of the work in Chicago has been the erection in Garfield Park, Chicago, of a Horticultural building costing $600,000, perhaps the handsomest building of the kind in America. I moved to Galt in 1906, and I found one of the most picturesque towns I had ever seen. In the meantime, it had grown from a town of 2,000 to 7,000 or 8,000, and it struck me that what was required was a moulding of public opinion along the lines of civic improvement, and I started a campaign there for civic improvement that never ceased. In 1896 they had one small park, more or less of a hay field, used for ball practice. By keeping everlastingly at it, in a few years' time, we added one park to another, and then the people who could afford it became interested, and one result was a splendid gift of 28 acres of wood land and a purchase of 9 acres additional, making what we call Victoria Park, perhaps the most beautiful natural park in Ontario. The play ground is one that the town is proud of, and every man who has seen it says it is one of the brightest in Ontario. Since then the town has created a public Park Commission. It took three separate and distinct times before the public approved of taking the park management out of the hands of the town council and handing it over to a board of Commissioners. No town council is capable of properly managing parks; it must be put into the hands of a commission. We carried this park commission by-law, and formed a board of management, and the first thing we did was to employ Mr. Todd, of Montreal, the landscape artist, to lay out a complete plan. That gentleman drew out one that was quite costly for a town of our size, but it has been followed almost as closely as possible.

The area of Galt is 1,400 arces. Taking out the water course and the cemetery and public school grounds, leaves about 1,100 acres. We have 123 acres of park land and play grounds, thus 10 per cent. of the area is devoted to play grounds and parks.

Mr. Hutt showed you some views of our park. We have educated the people of Galt to look for a more beautiful city, and one of our great helps has been our Horticultural Society. During the past two years we have more than doubled our membership, but how have we done that? We have the best men in Galt behind us. We do not hold up our organization as a charitable one. We ask them to give us support on the ground of good done to the town. We have ventured out on the kitchen garden proposition, and we have also included three schools. We bought a large number of bulbs and distributed them among the schools, and the results were exhibited at the Horticultural Association during the fall; and a more pleasing sight could not be witnessed than the vegetable market building at Galt at the time of this exhibition, with more than half the school children of the town exhibiting. We have an eye to the future in doing this work. We are educating the children to believe in flower life and beautifying the town, and in a few years these boys and girls will be heart and soul with every organization for improvement. We have in Galt a Beautifying Club, The

Horticultural Society, The Park Commission, and Local Improvement Committee of the Board of Trade, of which I am chairman.

The Beautifying Club secured Mr. McFarland, and we had a larger attendance than you have here to-day. We had Professor Hutt from Guelph, and we filled Carnegie Hall. Every member of the society was there along with their friends. That is the way we believe in educating the people. We have absolutely no slum district in Galt. We have the bill board nuisance, but we are powerless under the present law to obliterate this. If the Provincial Government will give us power to tax these bill boards out of existence, we will do our share. I am glad you put Mr. Mitchell on the executive; as a newspaper man he will be of great use to his Society. You want to get the members in sympathy with all these organizations, and then you will progress. The wisdom of the country does not live in Toronto or Montreal. If you want an illustration of short-sightedness of a municipality, you want to come to the city of Toronto, where you have a magnificent hall like this built on one block of land, when they had an opportunity to buy a lot of cheap land and secure more ground. I was in Chicago a few weeks ago, and I found they were making play grounds all over the city. You must provide play grounds for the children, and then you can keep the girls and boys off the streets and make better men and women and a better town. I am glad to be here as a member of the press to help the movement along, and I assure you that in the town of Galt we are doing our share to make the Horticultural Association deserve an increased grant from the Government of Ontario.

Jno. Cavers: In the course of last speaker's remarks he indicated that the substantial men of Galt were behind the Horticultural Society. I suppose from that remark the more wealthy men made some liberal subscription to the fees in the Horticultural Society, am I right in that? About how much fees do they collect from that source?

J. P. Jaffray: We are no charity organization. We do not go to any particular man and say we want $10 from you. We simply want their membership, and every member represents $1. If anyone wants to give a special prize at a show, well and good. Our membership is for each individual member, we want each man to believe he is getting full value for his money.

J. Lockie Wilson: I think the line we take at present is of great importance. I am very much pleased with the addresses of Professor Macoun and Mr. Jaffray who opened the discussion. I am glad to know he is a newspaper man, and takes a proper view of his work as such. I made a suggestion that we should have more newspaper men on the board, and I am glad you took the matter up and elected a newspaper man from the west, in the person of Mr. Mitchell. We shall be watching his paper closely for the next year to see if he will fill the bill as we expect him to. There is no better thing the newspapers of the Province can do than to further the work you are connected with. The press of the city of Toronto may well go down to the capital city of Ottawa and take a lesson from the newspapers there. Last year's reports of our great convention by the newspapers of Toronto were about as meagre as they could be. The reports of our meeting yesterday were, if possible, worse than they were a year ago. What are the reporters doing here? I do not want to find fault with them, because I presume they sent in magnificent reports, but the editors are the men we had better get after. The reporters, I have no doubt, took an interest in the papers and speeches, and had at least a column and a half for the morning editions. The newspaper men in Toronto are behind the times in as far as these important meetings are concerned, which gather in their midst, for

An Ornamental Bank and Hedge.

the uplifting of humanity and the beautifying of the homes of the poorest cotter in the land. Without the assistance of the newspapers we cannot do as much as we should. There is more required of the Directors than attending meetings. You must get home to your societies, and take off your coats and roll up your sleeves. There is a great deal of work for every director to do. It is for you to be up and doing.

"At least not rotting like a weed,
But having sown some generous seed
Fruitful of further thought and deed."

JAS. MITCHELL: I gather from what Messrs. Watson and Jaffray have said that somebody will have to get a move on away up on the shores of Lake Huron. I have two hobbies, that, if I were a man of leisure, I would devote my entire time to for the rest of my life; these are flowers and neglected children. Some of you, perhaps, may, and some may not, have tried your local newspaper. Now, I am not speaking for the papers of Toronto. It is an old complaint with regard to them, and they must attend to that themselves. But I may say with regard to the country press, that you will get all the space you want if you will furnish the matter. Of course, I belong to our Horticultural Society, and I look after that fairly well; but stirred up by what I have heard to-day and yesterday, I will take a new grip and I think probably we shall produce some results in the coming year.

Mr. Jaffray says that Galt is the most beautiful town in Canada, Goderich is not nearly so large as Galt, and we have not been at that sort of work so long as they have, but we are not going to take second place if we can help it, in being called the brightest town in Ontario. I want to appeal to every member of the Horticultural Society to enlist the sympathy of your newspaper men, by going to them and saying: "This is no matter of dollars and cents for us. We want you to follow the example of the City of Ottawa," and I venture to say they will do all they can for you. It is an easy matter for me to fill up my paper. The problem with me is how to use all that I have every week. If you give the editor matter he is interested in, he will insert it in the paper. We will write about flowers and encourage the children to our hearts' content, and give you what the patent medicine man asks for, "preferred position, top column, and columns along side of reading matter."

H. H. GROFF: I would like to explain the methods that have been in practice in our society. I had the privilege of organizing the first society, under the old Agriculture and Arts Act, with the assistance of that venerable organizer, Mr. Beall, of the Fruit Growers' Association. After several years the Department sent us able speakers. We came to the conclusion that the time had arrived when we should certainly justify our existence in our community as an organization productive of something for the general benefit of the community, and we took up the question of co-operative fruit associations. We brought the best speakers you could supply, with the result that the County of Norfolk, that was not an apple growing section, heads the list at the St. Lawrence arena to-day. Secondly, we have taken up school children's exhibits. We must look to the young as the basis of the material from which we are to secure our future membership, and I have great pleasures in saying that exhibition after exhibition has resulted in an increased quality of the exhibit, and also in greater interest from its educative aspect. Thirdly, the work which we are now taking up is that of improvement to our town. Last year we installed a system of water works, and we are about to commence a campaign for civic improvement.

Miss Rose: I would just like to corroborate what Mr. Mitchell has said with regard to newspapers. For some time I have been secretary of our Guelph Society, and we wanted the newspapers to publish our reports. They are only too glad to, if you will furnish them with the copy. Our last meeting was a splendid one, and was held in Carnegie Hall, which was three-quarters full. A reporter saw me that day and he said, "Give us a report, Miss Rose." I saw that he got it. We have a long list of school children's prizes and we issued a memorial to the city council for a board of Park commissioners. It was a long report, and it covered two columns or more of our daily newspapers. When I saw it, I said you would think it was the Fat Stock Show. It had been written up with large type at the top, and I felt as proud of it as if I had done it myself. I can speak for the papers that they are only too glad to get matter. But they want it written; they do not want to come and write it themselves.

H. B. Cowan: I feel the newspaper is an important aid in the work. You should see that the local press is fully informed of what is being done. The great success of the Ottawa Society is largely due to the way all three of the city papers have taken hold. Some time ago I was connected with the Hamilton Society. They were organizing an exhibition, and it occurred to some of us that we might get a pretty good report from the newspaper, and we sat down that night and wrote it up. It was predicted by half of the members that it would not be published, but the next day all three papers had a half-column on the front page. The same thing occurred in Toronto. We sat down and wrote up a report the night before. If you wander in about ten o'clock the next day they are so crowded that they cannot get it in; but if you hand it in at the right time, they will co-operate with you. Our experience in Toronto was the same. They had it on the front page in big headings. If you will give them the news, I will guarantee that they will back you up.

G. W. Hodgetts: I want to add a word along this line of newspaper work. I represented the St. Catharines Society, and for a number of years I was President, being elected from year to year. We finally elected a newspaper man, Mr. Burgoyne, and immediately our society sprang into new life. He was incessantly at it, and I think he has a report of the annual meeting before him, in which he gave us five or six columns of his paper showing the work of the last year. A great part of the success of our society is due to what Mr. Burgoyne has done for us in his newspaper.

J. Lockie Wilson: I want to correct a statement made by Mr. Cowan about the papers in this city. The press committee in charge here had a typewritten copy, and had that handed to the city newspapers last night before six o'clock.

The President: In closing this discussion, I am only sure that I voice the sentiments of you all, when I say Mr. Watson, although absent, spoke in such strong and inspiring tones, that to him we are indebted, and I trust that the representative here will convey our thanks for the very practical address he has given us.

That address has been supplemented by a most valuable contribution from Mr. Jaffray, who led the discussion. He has two very excellent qualifications. In the first place, he has a spirit of advancement from his intercourse and connection with the great civic movement on the other side of the line. He has brought that over to this Province, and he is showing us that in his own town of Galt great things can be done by the Horticultural Society in improving civic conditions. What Galt has done, every town in the Province can do. Mr. Jaffray has also a great big stick which he knows how to wield upon the civic pride of the citizens of Galt. As editor and

proprietor of *The Galt Reporter*, he certainly has wielded a great influence for good in that community. If we could only get our members to preach six days in the week, and combined with our ministers who preach once a week, it would be a very happy combination in the creating of a higher moral and material prosperity of this country.

J. T. Rose: We have an organization in Brantford that is flourishing, but we have not got the backing we would wish to have, as no doubt our secretary has told you. We are interested in children, that is the strong feature of our society. We distributed from 7,000 to 8,000 packages of seeds in the spring, and in the fall we had our exhibition, and Professor Hutt can tell you what kind of work we are doing.

The President: I have much pleasure in now calling upon Mr. H. H. Groff, of Simcoe, a gentleman who needs no introduction, who is noted all over Europe and America as one of the great hybridizers of this decade.

THE SCIENCE OF PLANT BREEDING.

By H. H. Groff, Simcoe.

The study of the Science of Plant Breeding is one of the most important interests in which it is possible to engage, and its practice is one for which the mind of no man can be too high. Its successful prosecution will tax the greatest powers of observation, patience and persistence, to the limit of the longest life of physical activity, with an ever increasing personal attraction as the years go by.

By means of the practical pursuit of this science, we shall be able to not only increase and improve those products upon which the people of this country must depend for their actual sustinence, but we will so increase them on points of quality, beauty and usefulness, as to make our existence more congenial than heretofore.

By these means not only do we expect to gain by increased productiveness for the labor expended, but with the every increasing demands made by our multiplying populations upon the product of the soil, increased productiveness becomes a necessity, while increased quality and beauty tend to the amelioraation of the conditions under which all humanity must exist.

Not only are we able to control and direct those vital forces which carry the desirable qualities which we may choose to select from the numerous species available for our work, but after we have succeeded in producing types of high economic or aesthetic value, by the judicious intercrossing of these, we can bring from the long dormant influences of eons of the past, many of those characteristics that have ceased to exist in the species, and which to-day are only apparent in the genera.

Science is knowledge and knowledge is power. Science is knowledge organized, and this organization is a three-fold process comprising the qualities of observation, generalization and inference.

Observation is by far the most important, and the capacity of the worker for this quality will most materially influence the extent and character of his ultimate success.

Generalization is a condition in which the mind revels during periods of physical inactivity.

Inference is also a mental condition, bearing upon the probability of those truths not yet observed.

Gladioli. Photo by H. H. Groff.

The material upon which you have to work is the product of ages of restrictive influences, tending to the depression of the vital forces which enter into the composition of the form, which may be expected to result in its partial or total disintegration, according to the character of climatic and local conditions.

For the purpose of classification this material is described in extended sections bearing similar characteristics, as genera, which are again divided into species, the wild types of all plant forms, which constitute the base of our efforts to bring their hybrid progeny into subservience for the use of mankind.

Having studied the individual peculiarities of the species we have gathered from all parts of the world forming their natural habitat, and having studied the effect of the influences of our light, heat and the whole course of temperature, the soil and its chemical and physical properties, moisture supply and food material, we may consider ourselves as supplied with a laboratory stock, on the judicious blending of which, coupled with the possible extent of our physical activity, depend the ultimate results in pleasure and material satisfaction.

The fact that important scientific discoveries have been made by men who have had little or no early theoretical training, is sufficient encouragement to workers of critical and practical temperament, to pursue their investigations on independent lines of thought with the assurance of some measure of success, and while such training is not to be decried, there are occasions when its absence finds the mind more free for development on special lines, with the possibility of securing phenomenal and valuable results. You learn from the open book of Nature, and the University learns from you.

This is an age of hybrids, and the limit of our activity is the only limit to be placed upon the possibilities available from the exercise of the science of breeding.

I will ask you to mentally glance across this continent and consider the changes wrought by untrammeled human intelligence within the memory of many here present. A wilderness has given place to the most advanced products of hybridity, both plant and animal, and results impossible in the old world (so called) are our heritage to-day.

The hybrid man has swept over its surface and practically exterminated the wild species of the human race. The wild animal species have been replaced by domestic hybrid types, from which select breeding is developing material adaptable to their changed conditions and more useful to mankind, with the tide of all our products, plant, animal and man, turning back upon old world civilization with powerful influence, both mental and physical.

The unfettered intelligence of man has bridged the ages, and in hastening evolution by hybridization, has rushed into the eons of the future and laid their treasures at our feet.

As already stated, hybridization means a blending of certain chemical constituents in the form, the harmonious co-occupation of which is not to be expected beyond the location in which they have attained apparent fixity, but this is true of species as well, in fact it is the influence of restricted environment for ages that has separated them into the series of groups we call species.

With the knowledge of this instability of the form as the result of hybridization, we may turn the tendency to general advantage and usefulness by infusing the blood of every adaptable species into the product of our work, thereby covering the greatest possible radius of inherent capacity for acclimatization, handed to us from the ages of diverse local and climatic isolation that have made them the individual types that we know them to be.

A Pretty Maid Admiring the Expanding Bloom. Photo by H. H. Groff.

To such an extent has it been possible to control the desired qualities, that my latest composite hybrids have produced fully 95 per cent. true to color, with over 75 per cent. carrying characteristics of such value as to make them worthy of retention. These features coupled with increased adaptability to changed conditions, make for the success which it is our desire to attain.

The indirect influence of this blending of vital forces in the individual product, is not the only advantage to be gained by the practice of our science, for hybridization induces sporting or bud variation, which may appear after years of apparent fixity, at such time as the chemical composition of the form is disturbed by some change in local conditions, and a new combination takes place and becomes a distinct force to find an outlet in some bud, and a new birth is the result, which is capable of multiplication by cuttings or grafting.

The most remarkable case of variation occurring in my experiences on the lines of bud variation or sporting, came from a named variety of European origin that had been multiplied in quantity, and grown by me for some years, with every appearance of having become a fixed type.

The ground color of the normal flowers was a vivid scarlet. In one season those of a single plant changed to a rich cerise, in the upper half of each floret only. The corm was reserved for special observation the following season, at which time the whole flower assumed the new color without change in any other markings or characteristics.

This new type thus became a distinct variety of such definite character as to not only perpetuate itself by multiplication, but to impress the new color upon its progeny in seed raising, with such force that the peculiar shades of acquired color permitted modification by means of an infusion of light blood, as well as intensification by means of a darker cross made for this purpose.

The practical and general application of my system may be outlined as follows: In order to secure the benefits of existing material, make crosses between every available type, regardless of apparent objectionable characteristics.

Select sires from these and use on every wild species obtainable, on special and general lines—crossing and recrossing until desirable types are produced. Do not use the wild species as sires, after first line cross.

Then bring the selected offspring of all wild species together in intercrossing on special lines, as each wild species will prove more useful than another in some individual feature valued by us, for as already indicated by me specialization becomes imperative.

The result of the foregoing will be, the creation of new domestic specific types, valuable as sires for use in revitalizing crosses on existing varieties of merit, and the production of new forms and types of unexpected quality and value.

For example, if the desire is to produce a white section, every effort should be made to originate such colors and shades from every known wild species, without regard to their colors. When fixed types of a desirable character have been so produced, these should be used as sires on selections from existing varieties as mothers, for the creation of new and valuable economic types.

While the foregoing operation is progressing for the production of commercial types, crosses should be made between all of these sires on individuals prepared for use as mothers by removal of the anthers before ripening of the pollen, with the object of creating new and distinct domestic specific

"Aren't They Pretty?" Photo by H, H. Groff.

types to be used as the progenitors of new forms and races, as well as for the revitalization of strains possessing valuable characteristics worthy of perpetuation and elaboration.

The results to be obtained from blending vital forces that have been isolated for ages in the natural production of wild species, give unbounded satisfaction, and the pleasant surprises are only limited by the activity of the worker.

While I might multiply illustrations with many valuable lessons on every point of interest to plant breeders, as it is to these that this is addressed, I will bring the point forcibly home to them by two examples. Would we expect to see the intelligent horse breeder of to-day go back for sires to the many toed type of the miocene period, were this possible; or even to existing "wild" species?

It was my privilege recently to admire a picture illustrating with artistic skill a most advanced human type of physical and intellectual beauty, a female form of such exceeding loveliness and perfection as to hold the gazer spellbound by its revelation of divine quality, while the portrayal of intellectual development and purity was so forceful and compelling as to grasp the very soul and lift it from its earthly surroundings to a position of silent and inexpressible admiration and reverence. This picture was entitled "An Heiress of the Ages." Would we expect her to advance to greater triumphs of perfection and beauty by an alliance with some of the semi-anthropoid types of early human development, or even with well known "wild" species of the present day?

Among many interesting experiences resulting from the intercrossing already referred to, a spike of bloom with the flowers on one side red, and on the other white, although a result to be expected, proved attractive to amateur visitors.

A most interesting section has developed, with spikes that twist and twine like a vine, a tendency handed down from past ages. As a vase flower this type presents a most attractive appearance, a four-inch vase full making a bouquet two feet in diameter.

The potency of the vital influence tending to produce semi-double flowers, also made itself manifest in the production of twin corms from single seeds. This effect is one of great scientific interest.

It is now twenty years since I began my work on the improvement of the gladiolus, but the first half only is known commercially. When the product of the past ten years is ready for dissemination, it will assure even greater satisfaction than that preceeding it.

On first offering my productions for sale, the invariable request was "send no reds." To-day I cannot supply the demand for this shade, and have refused $10 for a single corm of a red that is not yet increased in sufficient quantity to offer. In no other section has a variety attracted equal attention.

In the United States, where the field is so much larger than in Canada, my representative grows 10 acres, the largest acreage of high quality in the world.

The variety named "America" was distributed by me for years in collections, before it was multiplied and so named. It was used for the decoration of the yacht "Mayflower" for the Japan-Russia Peace Conference, and although only of average quality according to my standard, is admitted to be the best variety listed by the introducer under its present name.

Photo by H. H. Groff.

A Field of Gladioli.

My method of free dissemination of high quality types has always been objected to by the commercial advocates of the naming system, but it is upon this foundation that the popularity of my introductions is built, for it is by this means that the amateur has gained present knowledge and satisfaction.

Time has justified my faith in the ultimate appreciation of the intelligent grower. In 1904, that beautiful publication, "Country Life in America," gave my work a five page illustrated write-up, and gave me all deserved honor and credit, but in referring to my popular system of dissemination they said, "One man cannot stem the tide of a century of horticultural usage." Yet, in 1908, that popular and influential journal, "The Field," of London, England, in a lengthy editorial on the gladiolus, devoted practically the whole of its personal reference to my work. It stated "That not only had Mr. Groff improved the quality and variety of the flowers, but he has reduced the price to at least one-tenth of that charged a few years ago."

I cannot close without reference to my Pure White Cocker Spaniels, the only strain of the kind in the world, and a perfect example of mutation, which, like sporting, is a product of hybridization.

Three years ago, the "Sporting and Dramatic News," of London, Eng., were pleased to publish a photo and description of the first dog of the type. But they added with caution, "The type is not likely to become fixed." In 1908, on receiving a photo of a trio of these beautiful animals, they promptly copyrighted it for their publication.

You will, therefore, see by the foregoing experiences, that it is hardly safe to prophesy what we in Canada may not do. The value of such original work is beyond estimate for the illustration of the possibilities of our country, and its successful development is bound to exert a powerful though subtle influence for Canada and the Empire.

JAS. MITCHELL: I have talked with Americans, I fancy all of you have. How proud they are of that wonderful man in California, Luther Burbank, who has done very much along scientific lines. I have known Mr. Groff for a year or two, and I am going away from this meeting with as much pride for our Groff as any American can have for their Burbank. I think, one of the good things that will result from this gathering will be the popularity of that paper. Regarding the gladioli, we in Goderich last spring distributed some of Mr. Groff's Hybrids to our members, and one of the things of which we were all proud in Goderich was the marvellous beauty and the immense variety of bloom we had. I had such a bloom of gladioli that I wished Prof. Hutt had been up there at that time instead of in March. If you want to find something that will give you unbounded satisfaction and pleasure try some of these. When he was speaking of some of these varieties he had, I almost thought I had some of these fine specimens in our town. It has been one of the things that stimulated renewed interest in our society, and we hope that it is going to pay us handsomely for the expenditure.

H. H. GROFF: Mr. Burbank worked on my specialities for some years, and I was fortunate enough to buy out the result of his twelve years' work some time ago, although that was of no commercial value. At the same time I had the pleasure of securing them. In regard to the question of distribution, I do not sell. The distribution is all done by those who grow the product they get from me.

The PRESIDENT: I am sure every Canadian Horticulturist is indebted to Mr. Groff for his very interesting paper, and we regard him as as the magician of Simcoe.

Photo by H. H. Groff.

Gladioli.

Lilies.

SUPPLEMENTARY REPORT OF DIRECTORS.

The Secretary then presented the supplementary report of the Directors.

J. Lockie Wilson: The Board of Directors at a short meeting, decided to affiliate with the American Civic Association, and we recommend very strongly the societies in the different parts of the Province to do likewise. They can do so by the payment of a fee of $5. This association has a valuable fund of literature, and every society that becomes affiliated will secure copies. We also dealt with the question that appeared in Prof. Hutt's address with regard to the chairmen of the seven different committees. Some excellent names have been suggested for these positions, and it was proposed that a committee be appointed composed of the President, Secretary and Prof. Hutt to make suitable arrangements for this new departure. It was decided to appoint Prof. Hutt and your secretary as the delegates to the convention at Pittsburgh.

The supplementary report of the Board of Directors was adopted.

IN MEMORIAM—JAMES FLETCHER.

A. Alexander: The duty falls upon me to refer to the death of Dr. James Fletcher of Ottawa. Some of our societies have known him for many years. We in Hamilton not only learned to know him, but to love him. When Dr. Fletcher stood up to speak on a horticultural subject he not only said what was perfectly true according to the facts, and relations of these flowers, but you felt that the intensity of his love for nature, and especially for flowers, was honest and true to the very core as he was himself. I speak so feelingly because he was once or twice a guest at our home, and the whole family felt that they had an interest in him. It was only a few days ago that my daughter happened to be on the railway platform at Laggan, in the Rocky Mountains, and the only passenger who got off while she got in was Dr. Fletcher, and on the way back she and Miss Laut, the authoress, happened to call at Ottawa, and Dr. Fletcher sent a very kindly message to me at that time. He gave inspiration to a love for flowers and the cultivation of them.

It is with the deepest sympathy I rise to ask that the secretary of the association be requested to draft a letter of condolence, as a mark of the esteem in which he was held by the members of our association, and that the same be forwarded to his widow and family.

I cannot trust myself to say more, because I feel towards him as if he were a brother, and more intensely because the biggest hall in our city would be filled whenever he came, and we would always be delighted with the inspirations we got.

R. B. Whyte: I concur in all that Mr. Alexander has said with regard to our friend. I knew him for thirty-five years. We were close friends, and it was a great shock when I heard that we had lost him. I most heartily agree with all Mr. Alexander has said, and I hope our secretary will express the grief we all feel for the loss of such a zealous friend as Dr. James Fletcher.

A Member: Dr. Fletcher's loss will be one that it will be almost impossible to replace. He had a happy knack of imparting his knowledge to an audience in a very pleasing manner. He popularized his Horticultural and Entomological subjects as no other man I have heard has done. When he came to our city, we nearly always made a point of getting a day off, to spend

in the woods together, and he always left us carrying our very best wishes. It is a very sad duty we have to perform in paying a small tribute to a good man who has gone before.

Prof. MACOUN: Coming so lately as I have done from Dr. Fletcher's grave, it is very difficult for me to say anything. Mr. Alexander spoke of him being a brother. Dr. Fletcher has been to me almost a father for the last twenty-five years, and I shall miss him very much. My feelings prevent me from saying anything more, because we feel his loss very badly.

The PRESIDENT: It is a very sad duty that we have to perform in regard to this memorial tribute to one whose loss is irreparable to this country. To know Dr. Fletcher was to love him. It was only necessary to come into his presence a few moments to recognize his true gentility. At the same time he was a most earnest seeker after truth, and had that marvelous faculty of imparting it.

REPORT OF COMMITTEE ON PLANT NOMENCLATURE.

Your Committee on plant nomenclature, appointed at the last annual meeting of this association, begs to make the following report: Your committee met for organization on January 31, 1908, in Manning Chambers, Toronto. Those present were Messrs. W. T. Macoun, J. Cavers, Wm. Hunt and H. B. Cowan. Mr. Hunt was elected chairman and Mr. Cavers secretary. Two other meetings have been held since that date, at which all members were present.

Early in its deliberations your committee felt that its possibility of doing effective work would be greatly increased were its membership extended by the addition of representatives from the Ontario Vegetable Growers' Association and from the Canadian Horticultural Association. Your committee, therefore assumed the responsibility of inviting these two associations to appoint representatives to act on this committee. We are pleased to report that both organizations considered the matter favorably. The Ontario Vegetable Growers' Association appointed Mr. T. Delworth, of Weston and the Canadian Horticultural Association, Mr. Walter Wilshire, of Eglinton. Your committee trusts that their action in this matter will be endorsed at this convention.

Our efforts have been confined to the procuring of information on the matter of nomenclature of plants. With this object in view, the secretary was instructed early in the year to correspond with a number of prominent horticulturists in England and in the United States. Nearly all those addressed have written courteous and full and explicit replies to the enquiries made, and the committee beg to acknowledge the courtesy of these correspondents as expressed in their letters.

The following is a summary of the chief points made by several correspondents: Wilhelm Miller, editor of the *"Garden Magazine,"* says, "What we want is a uniform set of rules of changes in nomenclature whenever novelties are introduced or whenever new facts about old forms have been discovered. People who have trade interests in names fear that registration would, by reducing their novelties to synonyms of old varieties, cause them financial loss. In others, most tradesmen are afraid of uniform nomenclature because they think the object is to control trade, whereas the only basis upon which uniform nomenclature can be achieved is one in which scientific record is the dominant thought. To meet the objections of such tradesmen he would permit the introducers of "novelties" to express, in their catalogues, dissent from the judgment of any authority that might

be set up, because time determines the real merits of horticultural novelties and the important thing is to keep the records." He suggests that annual supplements to Bailey's Cyclopedia of American Horticulture, these supplements to be succeeded every ten years by a cumulative index of all the new varieties and species introduced since the publication of the original work, would be desirable; but he does not see that such is practicable.

Mr. W. N. Rudd, secretary of the S.A.F.O.H., writes; "The relations between Canadian and United States plantsmen are so close and the traffic between them so much greater than with other countries that it would be a most excellent thing to have the same standard adopted in both countries."

B. T. Galloway, Chief of the Bureau of Plant Industry, Department of Agriculture, Washington, D.C., thinks that the nomenclature of species of plants as found in Bailey's Cyclopedia is preferable to that found in any other comprehensive work for the following reasons: (1) The species are considered primarily as cultivated plants, and the modifications that have resulted from cultivation are recognized. In Index Kewensis, the plants are treated chiefly from the standpoint of the systematic botanist; (2) The number of species treated by Bailey is much larger and more comprehensive than in any other cultural treatise, and includes substantially all the horticultural plants grown in North America. Nicholson's work lacks many species that are important in American horticulture; (3) Few names that have become firmly established in horticultural literature, including trade publications, have been changed, and all names that have synonyms are arranged to readily show the old and new names. Mr. Galloway recognizes that there are difficulties in the way of plant registration, especially in the case of annuals and other plants commonly perpetuated from seeds; but adds: "Provision for registration of varietal names conformed to an adequate and workable code of horticultural nomenclature, accompanied by an account of origin and history and as accurate a description of the plant as possible, including statement of the locality and conditions under which it was grown, might tend to reduce the existing confusion and solve some of the present difficulties. Whether provision for legal or governmental registration of such names would be practicable at this time, I am not sure, though eventually that may be the best solution of the matter." He concludes by saying that the whole question should be much easier of solution on this continent than in Europe, because of the close professional and trade relations and the common language of Canada and the United States.

The Director of the Royal Botanic Gardens at Kew draws attention to the Botanic Congresses that are being held every five years—the first having been held at Paris in 1900, the second at Vienna in 1905, while the third will be held in Brussels in 1910. The Director believes that the code of rules adopted by these Congresses should be the standard of nomenclature of all divisions of plants down to and including species, and that the Index Kewensis with its periodical supplements furnishes the best registration of species extant.

The Secretary of the Royal Horticultural Society, (England), writes: "A systematized nomenclature of plants, and by an organized body, is not merely highly desirable, but is a practical necessity at the present day, by reason of the enormous multiplication of varieties, and the raising of new hybrids, by the constantly increasing number of expert horticulturists." "The main work of developing horticulture in our country now falls to the lot of this Society, (a society maintained by Fellows' subscriptions, and lacking any Government support." "The special flower societies look to us as a parent society." "We have a system of registration." He adds that the society has a garden in which tests of certain plants are made each year, in

order to weed out weak and undesirable varieties; and that in the case of plants promoted by a special society such tests are carried on by joint action with each one. As, for instance, Dahlias were tested this year in joint action with the National Dahlia Society. The registration of new species, hybrids, and varieties of plants and the results of these tests on well known varieties are published in the Journal of the Society. Periodically these registered results are collated, revised, and re-issued, each kind of flower or vegetable or fruit, with its respective varieties, being kept by itself. The Secretary concludes, "The 'Kew Guides,' provided the latest editions are used, are a good guide to the nomenclature of garden plants so far as species and the commoner hybrids are concerned, and are from time to time revised and brought up to date. For hybrid Orchids, probably the most complete list is that in Sanders' Orchid Guide."

Mr. Cameron, a member of your committee, has furnished an interesting and comprehensive letter on the subject under consideration. He suggests the establishing of an Experiment Station on botanical lines, describes the physical features of such a station, and characterizes the sort of man who should manage as well as the sort of men who should be helpers in such an institution. Mr. Cameron writes: "An immense benefit would be derived by a good system of registration, a revision of our lists, based along the most natural lines, and a simplifying of our flora, both indigenous and hardy exotic. That such a revision in nomenclature of plants is needed, no one of a practical turn of mind would question."

Your committee beg to direct attention here to the fact that there are two prominent features in this problem of nomenclature, the scientific and the commercial. The scientific features cover all divisions of plants; the commercial covers only species and varieties, and it should be based on the scientific. So far as the scientific phases of horticulture are concerned, it may be taken for granted that the reports of the Botanic Congresses that have been already referred to in this report, furnish a code of rules for the nomenclature of all divisions of plants down to and including species, since these reports have been very generally received the world over as authoritative. The report of the Vienna Congress of 1905 was given in full in "*Rhodora*" of March, 1907. The following is a brief summary of it:

"This Congress was the result of conferences of botanists held in Paris in 1900. A bureau composed of forty-seven botanists, representing all the most important countries of the world, was then formed, to organize an International Congress to be held in Vienna in 1905. At this Congress between 500 and 600 botanists attended, and the sessions lasted for a week. The time of the Congress was almost entirely taken up with the question of nomenclature. It was early agreed that the basis for the formation of any new code of rules should be the Paris code of 1867, sometimes called the De Candollean Code. The report shows that there was nothing radical, much less revolutionary, in the deliberations of the Congress. Certain principles were adopted; rules based on these principles were enacted and recommendations on secondary points were made. What was aimed at was the formulating of a regular system of nomenclature that would be recognized and used by the great majority of naturalists in all countries: a system that would correct most of the errors that have come down to us from the past, and which would prevent the making of similar errors in the future. It is evident that such a system must deal carefully with the existing conditions, even although there may be many cases in conflict with the principles and rules adopted. That this care was taken by the Congress, is shown by the fact that a list of nearly 400 generic names of plants is retained, although

Victoria Park, London.

Photo by J. S. Pearce.

these do not conform to the fundamental principles of priority. It was agreed that the rules should be adhered to from and after the first day of January of this year."

While the report of the Congress has been very generally accepted, officially and unofficially, by the leading botanical establishments of the world, it is only fair to say that an important group of American botanists have declined to accept this list of exceptions, and are continuing to use the oldest generic names.

The following are some of the leading principles adopted by the Congress: Fixity of names; avoidance or rejection of forms and names, which may cause error or ambiguity, or throw science into confusion; avoidance of the useless creation of names; no custom contrary to rule, if it leads to eror, or confusion, can be upheld; scientific names are in Latin; every individual plant belongs to a species; every species to a genus; every genus to a family; every family to an order; every order to a class; every class to a division. In many species, varieties and forms are distinguished; each natural group of plants can bear in science only one valid designation, namely, the oldest, provided that it is in conformity to the rules of nomenclature.

The following are a few of the rules: Botanical nomenclature begins with the Species Plantarum of Linnæus, Ed. I (1753), for all groups of vascular plants; to avoid disadvantageous changes in nomenclature of genera by the strict application of the rules, a list of exceptions, already referred to, is provided; these names are chosen from those that have been in use for fifty years after their publication, or which have been used in important published papers up to 1890. Then follow rules for the systematic naming of divisions, classes, orders and families; divisions and classes being generally named from one of their characters; orders receive names from one of their principal families with the affix *ales*. Families are designated by one of their principal genera with the affix *aceæ*. Genera receive their names from any source; these are substantives in the singular number and written with a capital letter and may be compared to our family names. Examples are, Rosa, Convolvulus, Gloriosa. Species are designated by the genus to which they belong, followed by a specific name or epithet, such as, Papaver Rhœas, Geranium Robertianum.

As to publication: Publication is effected by the sale or public distribution of printed matter, or indellible autographs; communication of new names at a public meeting, or the placing of names in collections, or gardens open to the public, do not constitute publication. On and after January 1, 1908, the publication of names of new groups of plants will be valid only when they are accompanied by a Latin diagnosis; the rules of botanical nomenclature can only be modified by competent persons at an international congress, convened for the express purpose.

The following are some of the recommendations: The specific name should, in general, give some indication of the appearance, the character, the origin, the history, or the properties of the species. Specific names begin with a small letter, except those which are taken from names of persons, or those which are taken from generic names. When the specific name is taken from the name of a man, it is formed in the following way: When the name ends in a vowel, the letter i is added, except when the name ends in a, when e is added; when the name ends in a consonant the letters ii are added, except when the word ends in er when i is added.

As to publication: Not to publish a name without clearly indicating whether it is the name of a family, or a tribe; a genus or a section; a species,

or a variety; to publish simultaneously with a new name, the Latin diagnosis, which will make the name valid from the point of view of scientific nomenclature. Authors' names, put after names of plants are abbreviated, unless they are very short. Botanists should use in modern languages Latin scientific names, or those immediately derived from them. The metric system only is used in botany for reckoning weights and measures. Temperatures are expressed in degrees of the centigrade thermometer of Celsius.

Your committee has the pleasure to announce that Prof. W. T. Macoun has completed his bulletin of 2,000 herbaceous perennials growing in the Botanical Gardens at Ottawa under his charge. This bulletin is now in the press and will shortly be ready for distribution. Mr. Cameron has also a list of some 2,000 trees, shrubs, and plants planted by him in the Queen Victoria Niagara Falls Park during the past twenty-one years, which list it is hoped will become the property of the Ontario Government. These two lists are especially valuable, inasmuch as they contain correct descriptions of the plants named, as well as having the names scientifically accurate. Prof. Macoun's bulletin forms an excellent beginning of the work required for correct nomenclature of plants.

Your committee has performed a small piece of practical work in the preparation of short lists of Per. Phlox, Dahlias, Gladioli, and Irises, which lists are incomplete and will be passed on to the committee of 1909 to be elaborated and completed.

In conclusion, your committee begs to state that as a result of its deliberations, it is convinced that there is a great field for work in the matter of securing proper and reliable information relating to plant nomenclature, and would recommend that this committee be continued in existence with such changes in its personnel as this convention may deem wise, and that this committee be given power to add to its numbers.

All of which is respectfully submitted, signed on behalf of the committee.

Wm. Hunt, Chairman.
J. Cavers, Secretary.

A. Alexander:—The report is very extensive, and from a botanic point of view very valuable. It is important that that subject should be before us as a Convention, but unless my memory is deceptive, that is not what the committee was appointed for. Our trouble as importers, and as men sending to the other side to nurseries for plants was (and this is what gave rise to the appointing of a committee), that we got plants with new names taken from their catalogues, and we find they are identically what we have had before. The difference between species or varieties or families never entered into our mind, but our difficulties were that plants came from nursery men with different names, and yet they were the same plant. My idea was, that they were to correspond with nursery men of repute, so that importers could be sure they got what they ordered. I got Perennial Phlox, sixty-four varieties, and when I grew them, and they came into bloom, I found I had been growing for twenty-five years under a different name three of the varieties that were said to be new. There is a well-known Phlox Lafalle. I got two of these under different names, French name and German name, identically the same. It was that trouble which gave rise to the appointment of this committee. I feel grateful for the labor gone to in getting up that report, but I say that it does not cover the point that we appointed them for.

Prof Macoun:—It was well understood that the point brought up by Mr. Alexander was one of the principal ones to be taken up.

J. M. Dickson:—I agree with Mr. Alexander. It was not mechanical nomenclature. Any man who understands plants will understand names. I did not expect they were going to do that kind of work. As Mr. Alexander says, these men are talking about varieties. We will take a catalogue with seven hundred Peonies in it. Will you have to describe them all in long Latin terms? All we want is when you buy Phlox called "Miss Lingard" from one dealer and "Snow" from another, you should know that the two are identical. There are thousands and thousands of varieties, and the difference is so slight that it would require an expert to differentiate.

Jno. Cavers:—I fear Messrs. Alexander and Dixon have been expecting too much for the first year's work. Our idea is that if we get down to a commercial list in a few of the leading species of plants in ten years from now, the Nomenclature Committee would be doing excellent work. The Royal Society in England have a garden, and in 1908 the authorities of that organization in conjunction with the Dublin society were testing Dahlias and weeding out inferior varieties. I think that furnishes a suggestion for a line of work.

The report of the Committee on Nomenclature was then adopted.

W. B. Burgoyne:—I move that the Committee on Nomenclature be reappointed, with the addition of Mr. J. Lockie Wilson, and that the Department of Agriculture be requested to arrange to have the comprehensive list of trees, plants and perennial shrubs compiled by Mr. R. Cameron, published with the annual report of this association as an appendix. Carried.

TUB PLANTS.

By Roderick Cameron, Toronto.

The subject selected by the committee for me is a large, varied, and very difficult one, viz: "Tub or Half Hardy Plants, their Usefulness and the Care of them during the Winter."

The number of plants that could be classified under this heading is legion, but I only intend to draw attention to a few which I consider the best or most useful that I have had to do with, and that I am making arrangements for at the present time to have planted round this building next summer.

All will admit that the grounds round this City Hall look very bare without a tree, shrub, or vine. It reminds one of a ship without a sail, or a bird without wings, although the building itself is a model of architectural skill.

As stated already, to compensate for the lack of the above trees and shrubs, I propose to plant the grounds with the half hardy tub plants; the name of such gardening we will call changeable gardening for convenience, since it permits a change of position and plants at the will of the gardener.

There may be an objection raised by some to such plants being used as they are of a formal character, but here the grounds, steps and terraces permit of such plants being used, and much depends on how they are placed. There are other reasons why this should be the style of gardening in such places, first the grounds are small in area, they are centrally located in the midst of dust, smoke, and poisonous gases, where no hardy evergreen could live; hence our reason for this style of gardening in such cases, where change of variety and location will require taste and good judgment.

The variety of plants best suited for such purpose are as follows: Buxus or Tree Box. They can be got in about a dozen varieties, green, golden, and silver leaved large and small leaved, standard and pyramidal forms.

The Euonymus Japonicus as evergreen bushes can be got in many varieties, green, golden and silver leaved, beautifully marked and of first quality.

The Acuba Japonica, like the Euonymus, can also be got in several varieties and beautiful markings, and there is no plant grown that will stand soot, gases, and dust better. The acubas are the plants that are so much used in vases, etc., in the smoky cities in the old world, where little else will grow but them and the Ivy. While on the ivy, let me say, that if the different varieties were trained in pyramidal form on wire frames, especially the variegated forms, there are few plants that can surpass them in beauty.

The Laurus nobilis is probably used for this purpose in America more than any other plant, and these sweet Bays can be procured in standard and pyramidal forms, their dark green prim form claiming for them a place for all decorations in church, cemetery or hall.

The Nerium, Oleander, can be used to good effect in the angles of buildings, and along with them may be planted the Eleagnus pungens, which can be got in different varieties of variegation, green, silver and gold.

Large plants of Carioptris mastacanthus can be used to good advantage in corners along the paths. This plant and the chaste shrub or Vitax Agnus castus are two of the latest to bloom, and both are much admired for their fragrance.

Here and there among such plants, but separate from them on the lawn, may be placed Hydrangeas hortensis in several varieties to give some bloom to the whole setting.

Catalpa Bungei is quite hardy, and when good heads are formed they look quite conspicuous when grafted as standards.

Ulmus parvifolia is also hardy, and will make excellent standard round-headed plants.

Yucca gloriosa and allœfolia should be used in such planting which would tend to give a more tropical effect.

Abelia florabunda and variety grandiflora make excellent tub plants, and bloom all summer if kept in cold storage all winter.

Thyoptis dolabrada and its variegated form should also be employed in such planting, since they are evergreens of the choicest quality.

I have now come to the end of my choicest varieties, and their names in full and some other varieties I will list at the end of this paper.

We have been mentioning the above as tub plants, but tubs at their best look out of place, are expensive, and require constant care, watering, etc. In place of tubs I use baskets made of half inch mesh chicken netting; they can be made by any handy man. Line the same with moss or thin, tough sods, place the plant, and fill up tightly with soil, water well by dipping, and they are ready to be planted where wanted, like planting a tree with a ball of soil attached to it. It will be seen that by adopting this method the plants can be lifted in the fall without disturbing the roots, they will require no care with water, etc., from the time they are planted until they are taken up again in the fall.

I will now try and explain my method of storage for the winter. I built a cold storage pit, a hole dug in the ground twenty-five feet by fifty, and ten feet deep. Against the soil there was a wall built of concrete all round except a space for a door through which to take plants in and out. This wall was built up to the surface of the ground, and joists thrown across every two feet; on top of this was built a green house roof, bars fastened to a ridge pole; the bars were made to hold glass on both sides with air space between. At the ends was left a space for a small door to act for an entrance to the loft above, to give air and let out excess of moisture. In the bottom of this cellar was

placed from two to three feet of good loam soil, and a month before planting this was saturated with water, or rather a month before the danger of severe frost. When it became dangerous to leave the plants out any longer, they were collected and planted in the soil in the aforesaid cellar, baskets, and all, the same as they were out of doors. In this position again the plants get no water until they go out next spring, the moisture in the soil being sufficient. The joists overhead in this cellar are used to run rolls of tar paper along when the temperature reaches zero outdoors: when fifteen degrees below zero, I had seventeen degrees of frost in the cellar. Here lies the secret to success, while the plants and soil are frozen keep them dark; as soon as the frost is gone give them the light again. I have taken such plants out in zero weather in an open waggon to decorate without any apparent harm to them.

The following is a full list of the plants that may be used for a changeable garden, and will do well in such a cellar as I have just described:

Yucca gloriosa, Yucca allœfolia, (variegated), Nerium Oleander, Abelia florabunda, Abelia grandiflora, Thyoptis dolabrada, Thyoptis dolabrada variegata, Hydrangea hortensis, Hydrangea Hortensis, var. Thos. Hogg. Hydrangea Hortensis variegata. Eleagnus pungens aurea maculata. Eleagnus pungens Fredriki variegata. Eleagnus pungens variegata. Eleagnus pungens macrophylla. Careoptris mastacanthus. Vitax agnus, castus. Buxus sempervirens arborescens. Buxus sempervirens variety pendola. Buxus sempervirens Aureus. Buxus sempervirens Aureus Marginatus. Buxus sempervirens Aureus Argentia. Buxus sempervirens Macrophylla rotundifolia. Buxus sempervirens Handsworthi. Buxus sempervirens Pyramidalis Var iegata. Enonymus Japonicus, Enonymus Japonicus aureus, Enonymus Japonicus Macrophyllus. Enonymus Japonicus medio-pictus. Enonymus Japonicus alba marginatus. Enonymus argentius variegatus. Enonymus Japonicus aureus variegatus.

Prof. HUTT: Had you any difficulty with the roots getting behind the wire netting?

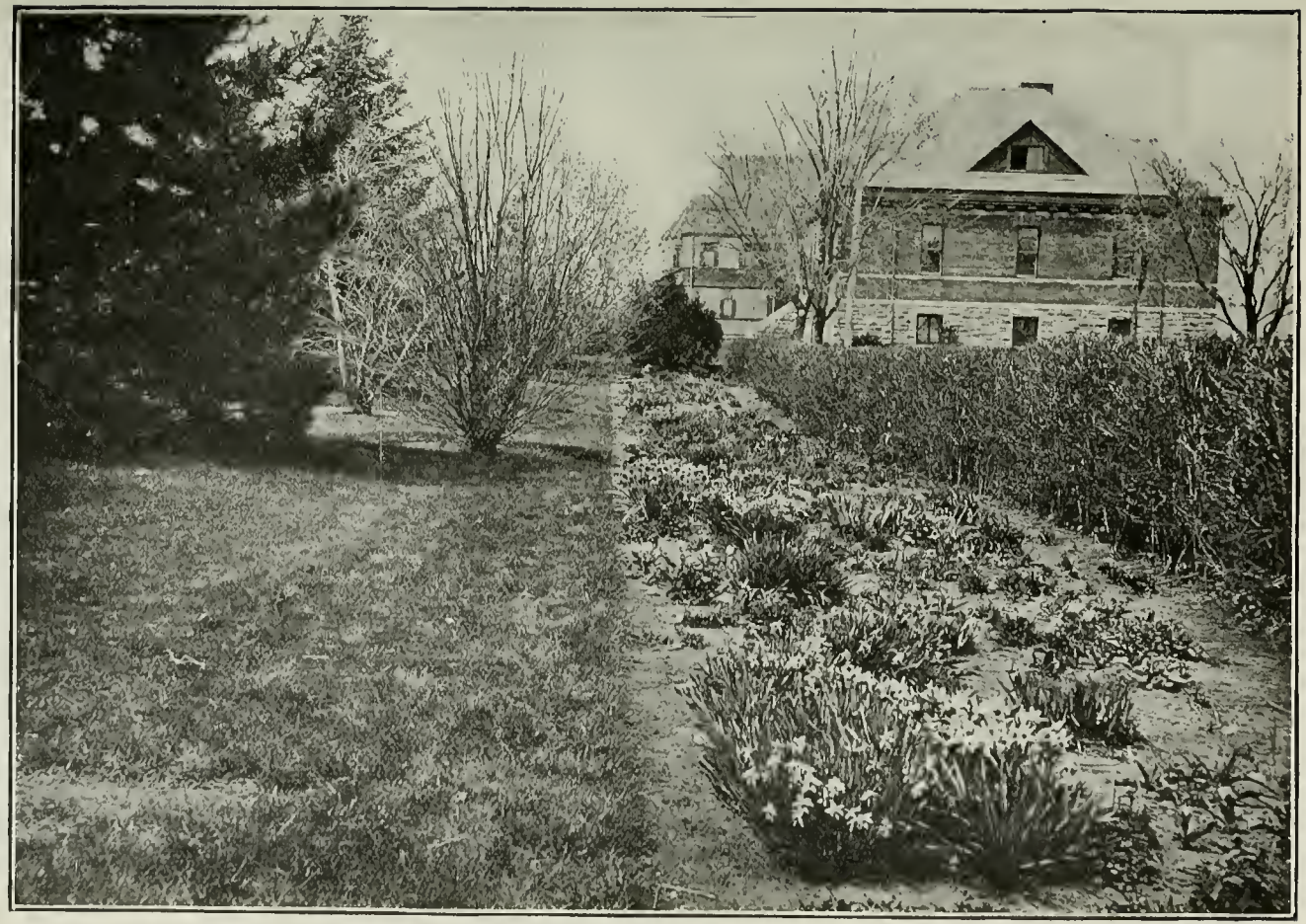
R. CAMERON: No. The baskets cost five cents apiece. Any person with a good pair of shears can make one. It only costs you five cents more to put a new basket on; every second year enlarge the size. Leave the old basket on; it will rot away itself.

PERENNIAL BORDERS.

By W. T. MACOUN, HORTICULTURIST, CENTRAL EXPERIMENTAL FARM, OTTAWA.

About ten years ago I began planting a perennial border near my house, the piece of land available being about 150 feet long and 12 feet wide, with a background of purple-leaved barberry hedge. The soil was a sandy loam in good condition, but it was improved before planting by digging in a good dressing of well rotted barnyard manure. Considerable planting has been done in that border every year for the past ten years, but it is not yet as we should like to have it.

A perennial border should have as little as possible of a formal look about it. It should have bloom from early in the spring until late in the autumn and the different flowers should come on in such rapid succession that there will be no places in the border where, on looking from one end to the other, it might be said: "There is not sufficient bloom there." A good collection of perennials was soon got together, but these were not found to give the desired results. Bulbs had been planted in fairly large groups through-



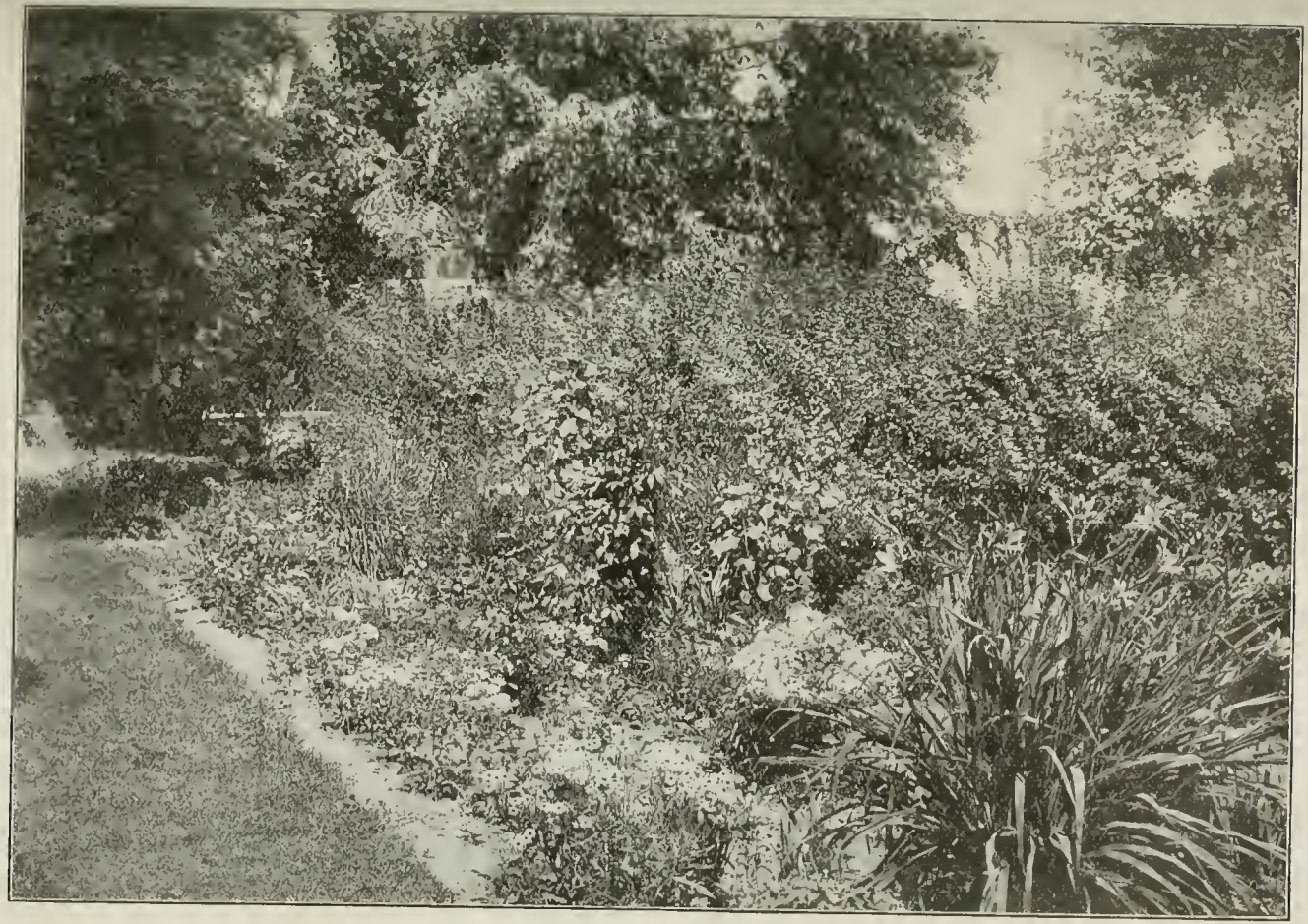
Perennial Border in Early May. Photo by F. T. Shutt.

out the border for bloom in early spring, but when they were over, there was a noticeable blank where there were no flowers for a long time. These spots might have been filled with phlox drummondi, verbena, petunia, etc., but annuals of this description seemed to us not in place in a perennial border as there is something formal about them, although some annuals are often desirable. We, therefore, decided to plant the bulbs in smaller clumps of from six to ten, which has been found more satisfactory. If there is a large number of small clumps of bulbs in a border, the spotty appearance which a few of these little groups would give is avoided, and on looking down the border there is apparently an almost continuous mass of color. After the flowers are over these little clumps soon become inconspicuous, as the adjoining perennials which are to give the succession of bloom grow over them. While the bulbs are still in bloom the Iceland poppies begin to flower. This pretty and graceful perennial with its white, yellow, and salmon colored flowers takes up little room and was planted alongside the clumps of late blooming perennials from one end of the border to the other. Planted in this way they add much to the attractiveness of the border while occupying little space. They seed freely and, once established, increase very rapidly. They should be treated as biennials rather than perennials, as after the second season the plants are not satisfactory. The Iceland poppies bloom from May until July.

Another plant which has been used for giving a good effect throughout the border is the Rocket (Hesperis matronalis). This grows readily from seed, and once established in the border there is little trouble getting the plants, as it reseeds very freely. The white flowered rocket is the best and the only one we use. The rockets are at their best in early June. The Oriental poppy blooms at the same time as the rockets, and as they grow readily from seed there is no difficulty in getting a large number of clumps of these. The contrast in color between these immense scarlet and crimson poppies and the white rockets is very fine. One of the surest ways of having a blaze of color in the border for from four to six weeks in the latter part of June and July is to sow Shirley poppy seed broadcast early in the spring, hoeing out later on the plants which are not needed. Shirley poppies, while not perennials, are excellent while the border is still young and has not become crowded with perennials. In our border the Shirley poppies are now confined for the most part to the places where the tulips and narcissus have died down, and even here they are having a more difficult time each year to make a good showing owing to the growing clumps of perennials. Herbaceous perennials which are grown readily from seed and which are used for giving color to spots in the border which are weak in color at particular times, later in the season, are the peach-leaved Bellflower (Campanula persicifolia); Cashmirian Larkspur (Delphinium cashmirianum); Delphinium grandiflorum, and Coreopsis grandiflora.

In the foregoing account of the development of the border little has been said of the perennials which form the main features of the border, such as the iris, lillies, phloxes, pæonies, etc., and the many other perennials which no good border should be without. These should be arranged as far as possible with an eye to continuity of bloom, contrast and harmony in color and relative height.

The most difficult time to keep the border looking well is during the months of August and September, when, in dry seasons, especially, the plants begin to look rather ragged, and the border lacking in bloom. Close attention to the removal of flowers which have withered and to flowers stalks will improve the appearance of the border and will encourage later bloom on plants which have already flowered, but there should be some late blooming perennials which can be scattered pretty freely through the border and which will



Perennial Border in July.

Photo by F. T. Shutt.

not take up much room. One of the most satisfactory of such plants is Lilium speciosum, which blooms well through September. Another desirable plant, grown readily from seed, and requiring little room is the purple Cone Flower (Echinacea purpurea), which also blooms until severe frosts. As a guide to those who desire to start a perennial border the following lists of the fifty and twenty-five best perennials should prove useful. These lists are taken from a bulletin on Herbaceous Perennials recently prepared by me and published as Bulletin 5, Second Series, of the Experimental Farms.

The illustrations used for this paper are from photos taken by Mr. Frank T. Shutt, Chemist to the Dominion Experimental Farms, and show the border which has been described in the months of May, June, July and August. Note the change in the plants which are in bloom during these months.

List of Fifty Best Hardy Herbaceous Perennials.

Achillea Ptarmica fl. pl., "The Pearl."
Adonis vernalis.
Althæa rosea.
Anemone japonica, varieties.
" patens nuttalliana.
" sylvestris.
Aquilegia caerulea.
" chrysantha.
" oxysepala.
Aster-amellus bessarabicus.
Campanula latifolia macrantha.
" persicifolia and varieties.
Chrysanthemum maximum elegans.
Clematis recta.
Coreopsis grandiflora.
Delphinium cashmirianum.
" hybridum and varieties.
Dianthus plumaris, "Mrs. Sinkins."
Dicentra spectabilis.
Doronicum plantagineum excelsum.
Epimedium rubrum.
Gaillardia aristata.
Gypsophila paniculata.
Helianthus multiflorus "Meteor."
" rigidus "Miss Mellish."
Hemerocallis aurantica major.
" flava.
Heuchera brizoides gracillima.
" sanguinea splendens.
Iberis sempervirens garrexiana.
Iris aurea.
" German, in great variety.
" laevigata (Kœmpferi), in great variety.
Lilium auratum.
" speciosum, and varieties.
" superbum.
" tenuifolium.
Myosotis alpestris.
Pæonia albiflora and officinalis in great variety.
Papaver nudicaule.
" orientale "Novelty."
Phlox divaricata.
" paniculata (decussata) in great variety.
Platycodon grandiflorum.
Rudbeckia laciniata fl. pl., "Golden Glow."
Salvia azurea grandiflora.
Spiræa Aruncus.
" Filipendula fl. pl.
Trillium grandiflorum.
Trollius europæus "Orange Globe."

List of Twenty-five Best Hardy Herbaceous Perennials.

Anemone japonica, varieties.
Aquilegia caerulea and hybrids.
" chrysantha.
Campanula persicifolia, and varieties.
Chrysanthemum maximum, and varieties.
Clematis recta.
Coreopsis grandiflora.
Delphinium cashmirianum.
" hybridum, and varieties.
Dianthus plumarius, "Mrs. Sinkins."
Dicentra spectabilis.
Epimedium rubrum.
Hemerocallis aurantiaca major.
" flava.
Iris, German, in great variety.
Iris lævigata (Kœmpferi), in great variety.
Lilium superbum.
" tenuifolium.
Pæonia albiflera and officinalis, in great variety.
Papaver nudicaule.
Phlox paniculata (decussata), in great variety.
Platycodon grandiflorum.
Rudbeckia laciniata fl. pl., "Golden Glow."
Spiræa Aruncus.
Trollius europæus "Orange Globe."

Perennial Border in June. Photo by F. T. Shutt.

RESULTS FROM SEEDS DISTRIBUTED TO SCHOOL CHILDREN.

By Jas. A. Wiley, St. Catharines.

[Mr. Wiley's paper was read by Miss Radcliffe, Secretary of the St. Catharine's Horticultural Society.]

In 1906, for the first time, then St. Catharine's Horticultural Society distributed seeds to the school children of the city to be grown by them, and prizes were offered at the July and September exhibitions for the best bloom grown and exhibited. Sweet Peas and Aster seed were chosen for distribution that year and since. The committee appointed to have charge of the distribution of the seeds secured the co-operation of the school teachers in placing the seeds in the hand of school children. On a given day, each and every member of the school who desired to try to grow the seed, was given a packet of Sweet Peas or Asters, as desired.

Culture directions were printed on the envelope containing the seed.

Results from Seed Distributed. While all children who took the seeds did not succeed as was desired, yet the result in many cases was very gratifying.

In July of that year 65 exhibits of Sweet Peas were made at the Sweet Pea Exhibition, and in September, 217 exhibits of Asters at that show, which reflected credit on the efforts of the children making them.

The exhibit of Sweet Peas and Asters for 1907 were equally gratifying, and showed a marked improvement in the quality of bloom exhibited. The year 1908 was the best yet. The Society not only distributed seeds to the city schools, but included Port Dalhousie, Merritton, Thorold, Grantham, and Louth Townships.

Though this did not prove a good year for Sweet Peas, there were 63 exhibits at the exhibition in July which showed a quality equalling many of the exhibits entered by the adults.

In the September exhibition there were 265 exhibits of Asters by school children, the largest number of entries yet made, filling a space of over 260 square feet, and a little crowded at that. The Asters showed such a marked improvement in quality and manner of displaying them that it was realized that the adults would have to look well to their laurels or they would lose them.

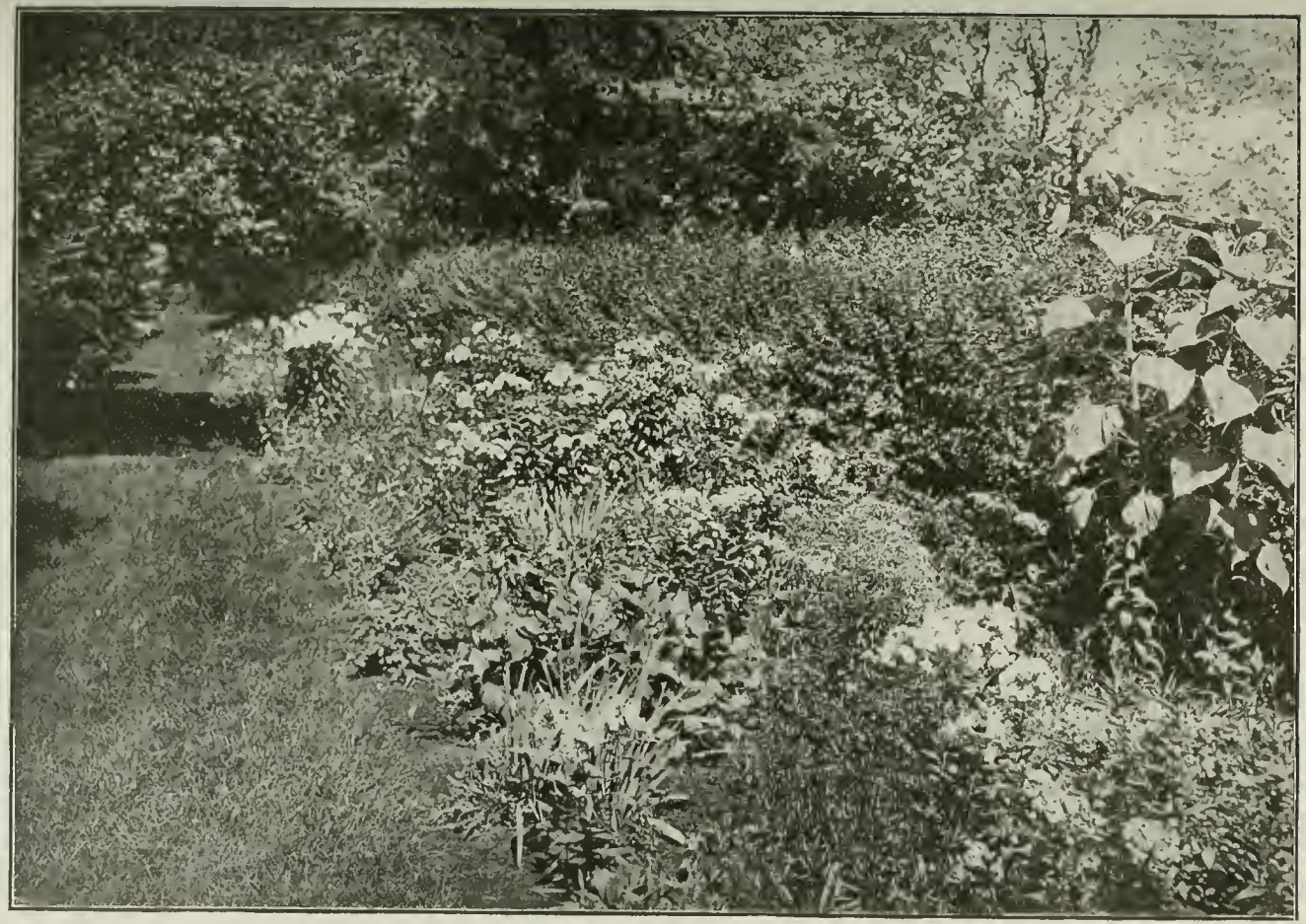
Other Results. The time is not far distant when the St. Catharine's Horticultural Society will be receiving many members from the ranks of the school children, indeed, some of them have joined already.

Then, not only are the creditable exhibits to be noted and the membership that may accrue to the Society through this work, but the vaster and more marked results are the improvements in the yards and gardens where school children are interested. Many an ugly weed patch has been turned into a spot of beauty, admired by all, and this influences the child life. While at work and associated with the beautiful, *the habit of industry acquired* cannot but make the child a better citizen.

By all means interest and educate the children in this work. It is worth the effort.

Prof. Hutt: Before we drop this question of school children's work, I would like to say that it is a most important one, and the societies that are doing the best work are those who are taking up this line with the school children. We have undertaken this in Guelph for some years, and we work on the same lines as St. Catharine's.

R. B. Whyte: You should give more instructions to the school children as to how to plant the seeds. We find it better to issue a bulletin of three or four pages, and give most explicit instructions. You have to make things very plain for children, and it would be difficult to give enough directions on the envelope enclosing the package of seeds.



Perennial Border in August. Photo by F. T. Shutt.

LABOR SAVING TOOLS FOR GARDEN WORK.

By H. Simmers, Toronto.

When your Secretary requested me to read a paper at this Convention on this subject, I accepted the same, not realizing at the time the difficulty I had before me of preparing an interesting and practical paper.

The title of this paper is somewhat deceptive. At the first blush it has the appearance of a certain sweet simplicity, but when one goes into the subject, the real difficulties appear.

For a practical man to go to work and pick out the tool or tools that he wants seems easy, as, before you commence to work, you have pretty well made up your mind what tools you are going to use on the particular work you intend to do; but to sit down and arrange as many as possible of the labor saving tools that you would use, is a more difficult task than I thought it would be until I got to work.

I assume that I am to speak on tools most suited for amateur work, because to write on this subject for professionals would enlarge it considerably.

The first, and still the most important tool in the garden, is the human hand, and no doubt in ages past it was the only one. Still, at a very early period, tools of some description had been devised to lighten the labor of the gardener. In our youthful days, also further back than some of us care to admit—a conundrum was propounded. It ran thus, "When Adam delved and Eve span, where was then the gentleman?" Of course, the answer, the obvious answer, is that Adam was the gentleman; and mark you, he was a gardener. Our immediate interest, however, is to enquire what Adam delved with. No doubt he did much work with his hands, still in many gardening operations the very best of tools, but he could not delve very well thus, unless he had something to aid him. The cradle of the human race is in the East, and it is there we can observe customs to-day, which had their inception in Adam's time or not long after. The soil there is so sandy and easily worked, that a very primitive stick sharpened, would be all the labor saving appliances required. Irrigation is the great problem there. In lands under different climatic conditions, different circumstances naturally arise, and in our own land one must admit that stirring with a pointed stick would not have much effect. Therefore other labor saving tools had to be invented. The king of all is still the spade, which is the most inexpensive, and work well done with it produces more crops than any other form of culture.

You will find that among the first and the last things to be done in almost any garden in spring or fall, is to have it dug in the spring and again in the fall, and those who are not so fortunate as to be able to employ a man for this work, will better understand the necessity of a pair of good strong arms.

The following is a list of a good many articles that I have used myself, that I know are labor saving tools: Spade, shovel, lawn rake, steel rake, field hoe, Dutch hoe, spading fork, manure fork, garden reel, garden line, grass hook or sickle, pruning knife, pruning shears, pruning saw, half moon edging knife, indelible pencil, labels, appliances for destroying insects, hot-bed thermometer, graden trowel, tree pruner, watering can, wheelbarrow, lawn mower, hand weeders, such as Hazeltine's, Excelsior, etc., wheel plow, wheel hoe, hand seed drill.

This is a sufficient list of labor saving tools for the amateur. It seems to me almost useless to go into the detail and description of all the tools that I have listed, and from which I will refrain, but amongst the list, I

A Pretty Avenue in Perth. Photo from Rev. A. H. Scott.

would like to draw more attention to the Combination Seed Drill, which has the garden plow, wheel hoe and seed drill combined. Now, to those who have a more pretentious vegetable garden, this modern implement is apt to encourage the amateur to extend his work. I would strongly urge the use of one of these combined machines.

I would also suggest, that all the tools possessed by the amateur be hung up neatly and systematically, and that they should not be thrown in a corner in a careless manner. I see no reason why man's labor saving tools for garden work should not be kept in the same precise manner that a woman keeps her kitchen utensils. I will add further, that the garden tools should also be kept clean and ready for use.

In conclusion let me add, that many a man can be judged by the orderliness in which he keeps his tools, as also by the way that he keeps his garden free of weeds.

REPORT FROM DISTRICT NO. 1.

By Rev. A. H. Scott, Perth.

The District which by your wish and favor, I have the honor to represent is in a significant sense, the gateway to Ontario, and thereby to the vast west of the Dominion of Canada. Through it flows the two great streams, the St. Lawrence to the south and the Ottawa to the north. At the confluence of these two rivers, and a few miles beyond the Ontario boundary, is the young, vigorous and promising enterprise, costing, in acres and buildings, millions of money, known as the Macdonald College and farm. In another part of the district is the older and better known Central Experimental Farm operated by the Government of Canada through the Department of Agriculture. Within our bounds we have the political capital of the Dominion and, close by, the Commercial Metropolis of Canada.

In our district were performed many of the pioneer transactions of our portion of the new world. Here were the first settlers, the first churches, the first attempts at government, the first encounters with the forest, and the first experience in Horticulture. To me our history and our environment present both responsibilities and inducements.

To any who attach special importance to counted heads it might not be out of place to state that in our district we have the largest society within the Province. If numbers were estimated by ratio or proportion my own society at Perth would perhaps be larger than the society at the capital. But we live in deeds not in years or numbers, and our accomplishments in District No. 1, to our credit be it said, are far and away behind our ideals.

During the year now terminating and throughout previous years, not as a whole but in parts of the whole, we have been seeking to contribute something to the good cause for which we are organized in the various ways that are common to our societies throught the fair Province of Ontario. Our cemeteries and our canal banks, the grounds about our Public Schools and railway stations, the environment of our hospital and orphans' homes, the civic improvements in town and capital, the embellishments of the country front and the village plot—these and a score of others that might be mentioned belong to a catalogue of endeavors up to the present.

Photo from Rev. A. H. Scott.

A Leafy Bower in Perth.

Photo from Rev. A. H. Scott.

A Shady Walk in Perth.

One of the newest features in our aim is the starting of certain machinery to attract our fellows in England, Ireland and Scotland who think of changing their trans-Atlantic quarters for cis-Atlantic homes by making known to them both residential and horticultural conditions which we believe are found between our two fine rivers and among the little lakes and attractive concessions that this association has mapped out as our particular sphere.

If we were coming down to the definiteness of names and thinking of these in connection with the work of the Horticultural Association perhaps among those who have visited us no name would be more conspicuous than that of J. Horace McFarland, whose presentations in a few places were much looked forward to. Then, as the expression of a sobering thought, and referring to the number that has gone out from us, who that think of one so well known and influential will not share in our sorrow by reason of the unlooked for vacancy that has been created by the decease of our brother and friend, Dr. James Fletcher of Ottawa. *Sic transit gloria mundi.*

But, facing forward, it must be our aim to have such conditions in our own district, and in districts farther west than ours, that the millionare's mansion and the humble man's dwelling will manifest a growing appreciation of nature's blessings as a part of the preparation that fits a citizen of our earthly realm for the beauties that are awaiting us in the glory that excelleth.

REPORT OF THE HAMILTON HORTICULTURAL SOCIETY FOR 1908.

By A. Alexander, Hamilton.

The principal feature in the year's work was the holding of a two-day horticultural meeting at the end of April.

The Ontario Department of Agriculture and the Hamilton Civic Improvement Committee co-operated in this, the former contributing the speakers, all of whom were experts in the various subjects treated. A genuine interest was manifested by the public who attended, who took copious notes and asked questions, so that the sessions had more the appearance of high school classes than of ordinary lectures. The lecture on "The City Beautiful," given by Mr. J. Horace McFarland, was very opportune; coming as it did on the evening of the first day it fitted in so well into the idea of the meetings that it seemed a part of it, though held in a different hall.

To all these meetings the teachers and students of schools were invited, many of whom availed themselves of the opportunity.

During the season lectures have been given by Mr. Macoun and Dr. James Fletcher, of Ottawa, and Mr. Hunt, of the Ontario Agricultural College.

The usual distribution of plants worthy of cultivation, with cultural instruction, has been issued and about three hundred copies of the *"Canadian Horticulturist"* distributed monthly to the members of the Society, who now number 300, an increase of 130 over last year.

The result of all this is seen in the awakened interest in the community, and in the improvement of lawns, gardens and general surroundings of their residences.

Photo by Rev. A. H. Scott.

One of the oldest Gardens in Canada.
The home of Miss Matheson, Perth.

REPORT OF THE LONDON SOCIETY FOR 1908.

The directors of the London Horticultural Society in consideration of the funds which they had on hand at the beginning of the year, decided to make a grant to the Public and Separate Schools of $10 each, to be used by Mr. J. S. Pearce, Park Superintendent, in designing beds, etc., to enhance the appearance of the grounds surrounding the schools and to bring prominently before the scholars the idea of flowers, etc., for beautifying their own home surroundings. This grant was supplemented by a similar amount from the Board of Education, and the Separate School Board also granted a similar sum. The work was under the personal supervision of Mr. Pearce and has resulted in improving and beautifying the school grounds in a marked degree. The sum of $220 was altogether expended by the society in this cause.

The society, also, in answer to a request from the Play Grounds Association of London, granted a donation of $25 in furtherance of their work and to be used in fitting up play grounds, etc. The members of the London Horticultural Society are in hearty sympathy with this work, and are of the opinion that public play grounds should be established in each ward, but this cannot well be done except with the hearty co-operation of the City Council, as the funds would have to come from the city.

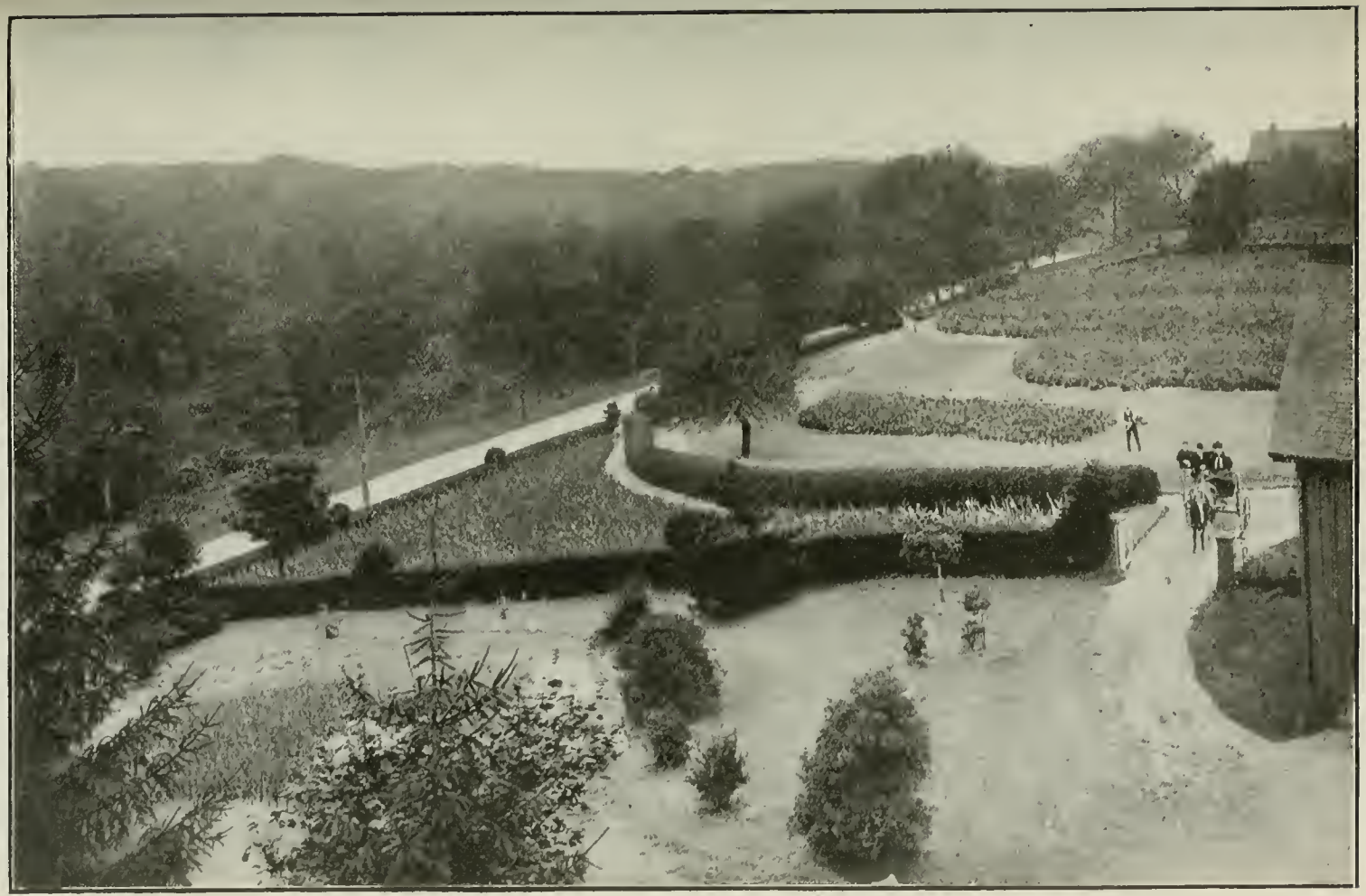
This year, as in the proceeding one, this society with the consent of the School Boards, issued to the scholars packages of seeds. The price was placed low, namely two cents per package, so that they were within the reach of every child. Some 5,800 packages were distributed to the school children, and it goes to show the great and increasing interest which is being taken by them in growing flowers and vegetables and in beautifying their home surroundings. The more we get the children interested in growing flowers, the greater improvements will be seen in the homes and front yards of the dwellings, and less vandalism will occur throughout the city.

The directors made arrangements for lectures to be given each month in the spring. The first one was delivered on February 25th, when Mr. Pearce and Mr. Gammage spoke on seeds and bulbs, and their cultivation, and Mr. Fox also spoke on the growing of mignonette. On Thursday, March 25th, Principal Liddicoatt spoke on bulbs for spring planting, and Professor Bowman on wild flowers, more especially those suitable for garden cultivation. On Tuesday, April 21st, Prof. Hutt, of the Agricultural College, Guelph, gave an address before a large attendance of members, his lecture being supplemented with stereopticon views.

Annual Flower Shows.

A fine display of flowers was made by the members of the Society in the City Hall, on the 24th and 25th of June. Some beautiful exhibits of roses were shown, and some specimens of the wild orchid, or lady slipper, gathered by Professor Bowman, created a great deal of admiration. A large collection of Canterbury bells, from the Asylum grounds, was also highly commented upon. Some 35 members of the Society sent exhibits.

The second flower show was held in the City Hall on August 12th and 13th, when over forty members sent in exhibits of tuberous begonias, gladioli, phlox, and other perennial flowers. Mr. H. H. Groff, Simcoe, on request of the president, most kindly sent a beautiful display of gladioli, which was exceptionally fine and greatly admired.



Where Flowers in Luxuriance Grow.

Flowers and Shrubs on Public and Separate School Grounds, Under the Direction of Mr. J. S. Pearce.

The ten dollars granted by your society and supplemented by same amount from the School Boards, both Public and Separate, has been carefully expended with the exception of two or three schools. The work on these will be done this fall or next spring, as there are good reasons for them not being done earlier. The expenditure of this money on each school I left largely, and in some cases entirely, in the hands of the principals of the schools, with instructions to buy where and from whom they thought best. I visited all of the schools twice, and many of them three or four times. I found all the principals, and many of the teachers, only too anxious to carry out the work and follow my suggestions. There is much of this work, and very much more could be done if funds were available. The observing citizens have noticed a great change in very many of the school grounds this summer, and should this good work be continued for a few years, the improvement will be very marked. The imperfect assistance that I was able to give the schools has been very much appreciated by the teachers, and especially by those in the Separate Schools; they being all lady teachers, were much in need of some one to advise and plan for them. Many of their schools were without a shrub or flower of any kind.

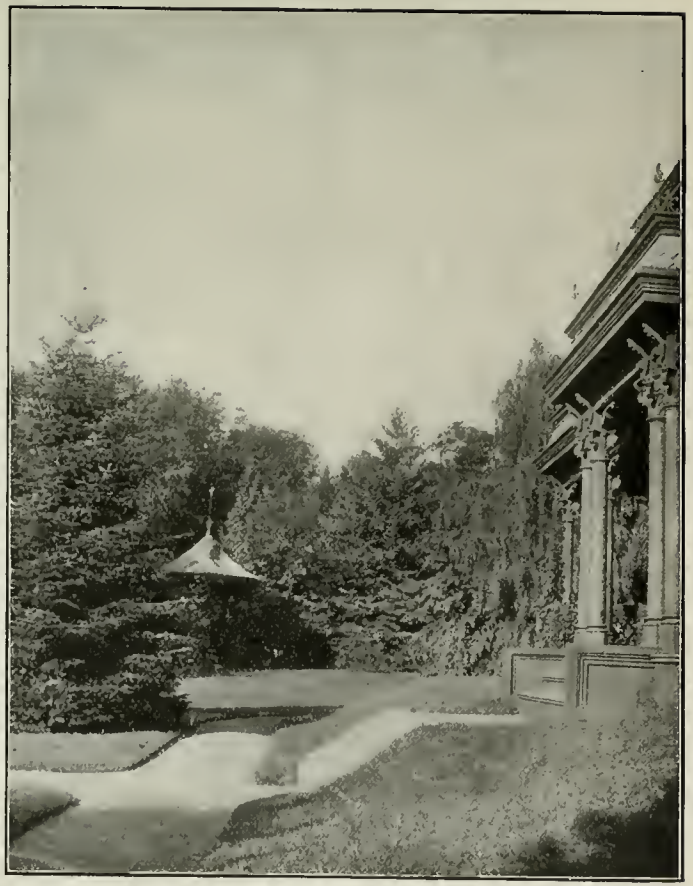
The $25 donated by your Board for the C.P.R. station garden was expended for plants, flowers, and labor. This has been very much appreciated by the citizens the past summer. The beds are again planted with bulbs supplied by the railway authorities, and I have instructions from Montreal to put in two beds of tulips at the passenger station this fall to be followed by flowers next summer. I had suggested this several times, but without success till this fall.

BRANTFORD SOCIETY FOR 1908.

Mr. Rose, Brantford, gave a short verbal report of the work of the society in that city, which had been almost altogether in the line of distributing seeds to school children and holding a show in connection with the same, which had been a great success.

The President:—I would like to remark for the benefit of the new Board of Directors that excellent as these reports are, they do not go far enough. With the exception of Rev. Mr. Scott, the others simply confine their reports to their own town or city, notwithstanding the fact that they represent groups of counties. I hope the directors will in future understand that their duties are to present a report covering the state of the Societies in the district, with whom they are supposed to keep in touch, not to confine their efforts solely to their own society.

Among Flowers and Fruit in the Grounds of Mrs. W. J. McCalla.



A View of Mrs. McCalla's Grounds.

NOTES ON SOME NEW PÆONIES.

By R. B. Whyte, Ottawa.

When in England last June I visited all the exhibitions and nurseries available, where Pæonies were shown, and made careful notes of those that I considered the most desirable varieties that were new to me, and I thought it would be interesting to those who had heard my talk on Pæonies and how to grow them, with list of varieties recommended at our last meeting, if I gave a brief description of those selected from the very large collections examined. Among the many hundreds of good sorts in cultivation there are doubtless many as good, and possibly better, than those noted, but any grower wishing to add to his collection can rely on the desirableness of any of the varieties in the annexed list. At the Royal Botanical Society's Show at Regent's Park in June, the first one at which Pæonies were staged in any quantity, the large exhibitors were Kelway & Son, Barr & Son, T. S. Ware, and Paul & Son, all of whom had very large collections. I visited Barr & Son, at Surbiton, and carefully examined their extensive collection. Pæonies were one of the main features of the Royal Horticultural Society's show, and at the Franco-British flower show. At the Royal Horticultural Society's gardens at Wisley there were a few varieties in their large collection in fine condition at the end of June. In the following list these that I considered the very finest in color, shape and size I have marked with **; those marked with *, while they appeared to me not quite up to the standard of the **, are still very fine sorts and well worthy of a place in any collection.

In the light of my increased experience the list of twelve best sorts given last year might be revised and improved by the substitution of four of the best of the varieties in the annexed list: Baroness Schroeder, Miss Salway, Ella Christine Kelway, Bunch of Perfume, taking the place of Marie Lemoine, Queen Victoria, Lady Leonora Bramwell, and Duke of Wellington.

Pæonies Exhibited at Royal Botanical Society's Show, Regent's Park, June 17th, 1908.

Kelway:

**Bunch of Perfume.—Rich deep pink, large, very double.—P.
Dorchester.—Blush, very fine.
Duchess of Teck.—Creamy white to pink, guard petals, large, very fine.
Ella Christine Kelway.—Extra fine pink, very large, flat, large petals.—P.
Miss Salway.—White,-primrose guard, large, extra fine centre.—P.
Lady Ester Smith.—White guards, cream centre, a few large petals in centre.
Mr. Manning.—Dark crimson, very large, fine form.

Barr & Sons:

Lady Ardilaun.—White, slightly tipped carmine, very large and very double.
Bonaparte.—Dark crimson, very large, fluffy petals.
Humei Carnea.—Pink guard, white centre, large, very fine.—P.
Delicatissima.—Blush, very large and double.—P.
(Floral Treasure).
Mad. Calot.—Creamy blush, deep shade, very fine.—P.
La Tulipe.—White, faintly tipped carmine, very fine shape.—P.
Albert Crousse.—Clear pink, very large, very double.

Kelway:

*Sainfoin.—Rich deep pink, semi-double.
Hallam.—Crimson, large and very double.
Limosel.—Deep pink, very double, good size.- P.
Baroness Schroeder.—Pale pink to cream, large guards, medium size.—P
Portia.—As Festiva Maxima, with a shade of blush.
Sir M. Singe.—Dark crimson, ball shape, very fine.

Barr & Sons:
Countess of Clancarty.—Very fine, pure white.—P.
Gloire de Patrie.—Very large, deep pink.—P.
Lord Rosebery.—Fine shade of pink.
Leonie.—Pale pink, medium size, fine shape and color.—P.
Triomphe de Paris.—Creamy with a shade of pink, large guard.
Alba Superba.—White, cream centre, good size.

Barr's Nurseries, June 19th.
Marshall McMahon.—Light crimson, large.
Eugene Verdier.—Pale pink, semi-double, shaded salmon.
Washington.—Silvery pink.
Snowball.—White, large guards.
Silenus.—Silvery pink.
Gen. Cavaignac.—Rosy silvery pink, shaded clear pink.—P.
Charles Verdier.—Dark rosy.
Duchess of Nemours.—White to faint primrose.—P.
Mistress Parkinson.—Lavender pink, fine form.
Duchess of Sutherland.—Pink, good color and shape, medium size.—P.

Kew Gardens, June 19th.
L'Elegance.—Rosy pink, good.—P.
Lady Carrington.—Blush to white.—P.
Mons. Dupont.—Very light La Rosiere, very fine.

ROYAL HORTICULTURAL SOCIETY, 23RD JUNE

Kelway:
**Sir Geo. White.—Very large, rosy pink.
Rev. W. Wilks.—Very large pink.
Lady Romilly.—As Mad. D'Hour, rather deeper pink.
Marie d'Hour.—Rosy pink, very fine.
Mons. Roussilon.—Very large, dark blush.—P.
*Lottie Collins.—Very large, light crimson, semi-double, yellow anthers.
Lord Cromer.—Large rosy pink.
Duke of Devonshire.—Light crimson, yellow centres.

FRANCO-BRITISH EXHIBITION, 24TH JUNE.

R. H. Bath:
**Mons. C. Leveque.—Extra fine blush.—P.
Enchantress.—Very pale blush.
Claude Loraine.—Extra large pink, good form.
Edmond About.—Extra fine pink, streaked carmine.
*Marie.—Very pale blush.
Gismonda.—Pink, very large.
Mad. Hutin.—Very double pink, centre nearly white, ball shape.

WISLEY, JUNE 27TH.

**Viscount de Fonceville.—Very large pink, fine form.
Mde. D. Galhau.—Very large pink, extra fine.
*De Candolle.—Rosy pink, fine shade.
Felix Crousse.—Dark rosy red, ball shaped.

REVISED LIST OF TWELVE BEST PÆONIES.

Md. D'Hour.—Very large, free bloomer, flesh color, tipped carmine.
M. Jules Elie.—Silvery pink, very large.
La Rosiere.—White, yellow centre, semi-double, remarkably free bloomer, very sweet.
Festiva Maxima.—Very fine, white-tipped carmine.
Floral Treasure.—Soft rose, fragrant, free bloomer.
Asa Gray.—Salmon pink, very large, free bloomer.
Claire Dubois.—Light rose, very large, free bloomer.
Ella Christine Kelway.—Extra fine pink, very large, flat, large petals, sweet.
Baroness Schroeder.—Pale pink to cream, large guards, perfumed.
Miss Salway.—White, primrose guards, large, very fine centre, perfumed.
Bunch of Perfume.—Rich deep pink, large, very double, perfumed.
Rubra Superba.—Purplish crimson, very free bloomer.

TREES IN VILLAGES, TOWNS AND CITIES.

Tree planting is a work which should be inaugurated and systematically carried out by the members of Horticultural Societies working in conjunction with Municipal Councils. Trees should be planted for the following reasons:—

They increase the value of surrounding property.

Protect the pavement from the heat of the sun.

Add beauty and comfort to city streets.

Cool the air in summer and radiate warmth in winter.

Purify the air—the leaves inhale carbonic acid gases and exhale oxygen.

Aid in counteracting the unnatural conditions of city life.

Home of Mrs. W. J. McCalla, St. Catharines.

The following varieties are now being utilized in many towns.

Maples, preferably hard; Elms (American); Birch (white); Oak, and many varieties of evergreens.

The following distances should be left between trees:—

1. Maples—15 to 25 feet apart.
2. American Elm—15 to 18 feet.
3. White Birch—16 to 20 feet.
4. Oak—15 to 18 feet.
5. Evergreens—according to variety.

REPORT OF THE COMMITTEE ON NOVELTIES.

Hardy Perennials.

To begin with the awakening season of spring: Crocus "Blue Celeste," a soft azure blue, Barr & Sons, describe as "the most beautiful of all the large flowered crocuses," and they are right; it remains long in bloom.

The Earliest Muscari (Grape Hyacinth) is *M. Azureum robustum*. It is larger and handsomer than the type, blooming the 8th of April, 1908, when the later ones were only just peeping above the ground—the color is pale blue with faint white lines. The exquisite muscari "Heavenly Blue," one of the later ones, is aptly named, and the leaves have a good erect habit which some varieties lack.

Two other beautiful ones are *M. botryoides candidum*, white delicately tinged with rose, and *M. b. pallidum grandiflorum*, a pale blue, shading to pink. These are contemporary with Heavenly Blue, and are about three weeks later than *M. Azureum*.

The beautiful *Scilla Sibirica*, one of the richest blues in flowers, has a white flowered sister. *S. Sibirica alba*, identical with it, except in color, is a very pure white. *S. bifolia* is spoilt by its lanky growth, but *S. bifolia carnea*, with pale, flesh-pink flowers is lovely. These two were grown in pots so I cannot vouch for their hardiness. Of the May flowering Scillas (which are almost like a Roman Hyacinth in shape and size of bloom), *S. Hispanica alba compacta*, with a large spike of pure white bells, is very fine. "Blue Celeste" is a fine blue, and "Rosalind," described as a clear pink, but which is really a mauve pink, is pretty. Of the Patula varieties, *P. major* is a lovely soft mauve and very large in both spike and flower. The old *S. Nutans* (English Blue-bells) belong to this section of the Scillas and are quite hardy though not as beautiful as those just mentioned.

In Polyanthus, those known as Dean's Hybrids are most beautiful and quite easily grown from seed. Every tint from "old rose" to the deepest magenta crimson, on through the yellow and orange shades to wallflower reds—all the gorgeous colors imaginable run riot in them. There are also white and cream and primrose with large eyes of varying shades of yellow, and varying also in size from a mere ring in the centre in some to usurping half the flower in others. The individual flowers being nearly as large again as in the old types. They began blooming on the 28th April, 1908, and in my garden diary on May 24th, I find the note "Polyanthus just in their glory."

Dean's Hybrid Primroses are also good, but are more difficult to raise from seed. I had only four or five plants from a packet, but they were all different; one, the usual Primrose color; the others various "Art Shades" of rose. All had the old fashioned fragrance, however. Wilson's Blue Shades I have not yet tried.

The double form of *Alyssum Saxatile* is not as showy as the single; the blossoms wither instead of falling off, as they do in the single, which gives a faded look.

In the "Rock Cress," *Arabis albida*, the double form is a decided improvement on the single, as it lasts much longer and is generally more effective. The single one is valuable though, as it is earlier than the double, and it is practically over before the double begins.

Barr's Dwarf Bearded Hybrid Crimean Irises, of which I got seven varieties in 1907, were a delightful surprise in their beauty as well as earliness. Pumila Caerulea, four inches high, was the first in bloom on the 18th

of May—an exquisite pale blue. Orange Queen, 23rd May, one foot high, a clear, pure yellow. This and "Canary Bird," nine inches high 24th May, are almost identical, the latter being a stronger grower and better on that account.

Bridesmaid, white; Cyanea, deep blue-purple; Blue Stone, light and deep blue; and Fiberi, deep violet blue, were all lovely, some being quite as large in the flower as the ordinary Iris.

Amongst what is popularly known as the German Iris (*I. dalmatica*), "Princess Beatrice," towers above all the others in size, form, and beauty of coloring. It is described as "a clear, deep lavender," which scarcely does it justice; a pale blue mauve sounds more attractive and is quite as truthful.

Others of the newer Iris that are well worth growing are "Aurea," the softest chrome yellow; Mrs. Newbronner, a splendid rich yellow, but a poorly formed flower; Darius, standards, bright yellow; falls, primrose, reticulated purple, brown-to-mauve, with a deep border of the primrose; a very fine, softly colored flower, the best of its color that I possess. *Alba* (Syn. *Innocenza*) a good clear, clean white, not so graceful as the early white Florentina, but valuable, as it flowers later. Mr. H. Darwin is said to be the finest white, but mine died, so I have not seen it. "Lucretia" is a fine large flower. Standards, primrose, and falls, primrose and mauve, the colors blending beautifully; it has a large spike and carries its flowers well.

The richest and best of the purples is "Kochii" (Syn. *Atropurpurea*), a huge, well shaped flower, well placed and the stem and the spikes well furnished with flowers. Almost as good is "Purple King," with just a hint of more red in the purple.

"Jacquiniana," standards, fawn, flushed with rose color, and falls, wine crimson, is one of the handsomest of the family. I have had the same Iris sent me as "Lord Rosebery," and also as "Dr. Bernice."

Of the Siberian Iris, some of whose varieties flower later than the German, and help to keep up the succession, two very beautiful ones are "Blue King" and "Snow Queen," though perhaps no more so than the old *S. Orientalis*, which is attractive both in bud and flower.

The "Sun Rose," "Mrs. C. W. Earl," a hybrid of *Helianthemum vulgare* (as Robinson says all the hybrids are), has proved hardy for two winters, against a warm west wall in well drained soil. This one has double crimson flowers and is a pretty little creeping shrub.

Veronica teucrium dubia (syns. prostrata and rupestris) though possibly not a novelty except in Canadian gardens, is such a beautiful little creeping plant (four inches in height) that it should be grown by everyone. Its tiny spikes of brilliant blue flowers literally smother the foliage. It blooms in June. It has proved hardy the last two winters.

Hemerocallis aurantiaca major is a very handsome "Day Lily," very much larger than the old *H. flava* (the "Lemon Lily") and a soft, clear apricot color with no hint of tawniness in it. It is reported to be slightly lacking in hardiness, but mine came through last winter safely without any particular attention.

Erigeron speciosus superbus, is a most satisfactory plant without the weedy effect of the type (*E. speciosus*). In early July its large, pale mauve flowers cover it with bloom and they last well.

Spiraea Aruncus Kneiffi is a graceful cut-leaved variety, pretty, both in and out of bloom.

Spiraea Kamschatica (syn. *gigantea*) is so handsome in both foliage and flower, that I cannot resist mentioning it though it may not be new. Its

large, deeply lobed, palmate leaves, are most decorative, and its snowy flowers are as beautiful as a spray of elder blossom and not unlike it.

Anchusa italica, "Dropmore Variety," which is so frequently mentioned in English publications as being one of the most important of the newer hardy plants, is in color a very beautiful rich Larkspur blue, but its weedy growth makes it unsuitable for small gardens. Of the newer named varieties of Delphinium I have no knowledge, but Mr. Byfield's collection grown from seed of Kelway's named varieties is the very acme of perfection in Larkspurs—every tint of blue, from the palest to the deepest, and every combination of mauve and blue, and blue and purple, and—rarest of all—some creamy white; some very double, some semi-double and others single, with "bees" both light and dark, until one wonders if every possible change has not been rung in them. The flowers are huge and so are the spikes in most cases, so beautiful are they that it seems as if it would be utterly impossible for the named ones to surpass them.

Lysimachia clethroides ("Snowy Loosestrife"), two to three feet high, with long arching spikes of white flowers, in July, is a good plant for rough places, where its spreading habit is no drawback. It is as bad as Golden Glow in that respect.

Monarda didyma var. "Cambridge Scarlet," is a great improvement in Bergamots, the spikes being larger and fuller and of a much more brilliant color.

Phlox Suffruticosa var. "Miss Lingard," is an early white phlox that can scarcely be too strongly recommended. "Indian Chief" belonging to the same section, is a miserable color, a dull magenta. I have not tried any others.

Of the later Phloxes, Hybrids of *P. paniculata*, "Von Hochberg," is the finest deep crimson, "Jocelyn," a vivid salmon-red with deeper eye, "R. P. Struthers," a deep salmon rose; "Edmond Rostrand," deep magenta rose with large white eye—enormous flowers—(Jourdan is the same); "Etna," a brilliant orange red, "Von Goethe," an exquisite rose color, deeper than "Pantheon," which is also good. "Daukse Dandrige," and "Eugenie Dauzauvilliers" are both distinct, and yet much the same tint of pinkish lilac and white, very dainty, as is "Peach-blossom," white suffused with the faintest pink. "Henri Murger" is a very fine, pure white with a large eye of deep rose. "F. G. Von Lassburg" is the finest tall pure white, and "Hermione" is a charming dwarf white, ten to twelve inches high, with such large trusses of bloom that it is as broad as it is long.

Helenium "Riverton Gem" with flowers of a rich wall-flower red is a handsome plant, tall, and with the good staying properties of the genus *H. autumnale cupreum*, is not nearly as handsome, the red being shot with gold, sounds well, but in reality gives an indistinct coloring which is not effective.

Anemone Japonica, "Queen Charlotte," is a very beautiful pale, silvery pink. Exquisite as these late Anemones undoubtedly are, their lack of hardiness is a great drawback.

The two *Boltonias* "Asteroides," white, and "Latisquama" mauve, growing five to six feet high, are indispensable fall blossoms, reminding us of our beautiful wild Asters, of which, by the way, there are many species worth cultivating, particularly *A. grandiflorus* with its rich mauve-purple flowers, blooming now, and, though a Virginian, it appears to be hardy here. Of these "Star-worts" or "Michaelmas Daisies," Barr & Sons catalogue (of species and their hybrids) over a hundred varieties.

Western Driveway, Queen's Park, Toronto

Cimicifuga Simplex (a Japanese Snake-root), has long wand-like spikes of feathery white flowers in September, and is well worthy the Award of Merit it received from the R.H.S.

Aconitum autumnale, var. *Fischeri*, is a very beautiful Monkshood, of the softest blue. It blooms in October, when such flowers are scarce.

Polygonum baldschnanicum is a climbing vine, of very graceful habit, with white flowers daintly pink tinted. It has stood for three or four winters here, so may safely be called hardy. It flowers more or less all summer.

P. multiflora is a very rapid grower, but useless as a bloomer, as it is always frozen down before its flowers have a chance to open fully.

W. T. Macoun,
M. E. Blacklock,
H. L. Hutt,
Committee on Novelties.

The President: We have reached the end of our programme, I do not think there is one of you, who has had the privilege of attending this third annual Convention of the Ontario Horticultural Association, but will be able to report to your local Society that you attended the most successful gathering of the kind ever held in this Province. I am sure we have contributed a very important and interesting chapter to the science of Horticulture in this country. I thank you all for your interest, which has been sustained all through, in spite of the great many other attractions in the city, I know it is a temptation to many delegates who are sent here to represent the various societies to go somewhere else. I congratulate you for having stuck to your post of duty. It shows the entrancing interest you feel in your work. I would like to thank, on the behalf of the Association, the Toronto city authorities for giving us the free use of this spacious committee room. We owe them a debt of gratitude for that. I see no reason why this Association should not become the Royal Horticultural Society of Ontario.

The meeting then closed with the singing of the National Anthem

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ARBOR DAY.

God save this tree we plant!
And to all nature grant
  Sunshine and rain.
Let not its branches fade,
Save it from axe and spade,
Save it for joyful shade—
  Sheltering the plain.

When it is ripe to fall,
Neighbored by trees as tall,
  Shape it for good.
Shape it to bench and stool,
Shape it to square and rule,
Shape it for home and school,
  God bless the wood.

Lord of the earth and sea,
Prosper our planted tree,
  Save with Thy might.
Save us from indolence,
Waste and improvidence,
And in Thine excellence,
  Lead us aright.

—*Henry Hanby Hay.*

STATEMENT OF ACTUAL RECEIPTS AND EXPENDITURE OF SOCIETIES IN 1908.

Horticultural Societies.	Members' fees.	Legislative grant.	Municipal grants and donations.	Gate receipts at exhibitions.	Total actual receipts.	For exhibitions.	For seeds, bulbs and plants.	Lectures and periodicals.	Officers' salaries.	Total actual expenditure.
	$	$	$	$	$	$	$	$	$	$
Amherstburg	160	100	.....	.....	248	.....	207	2	.....	246
Barrie	132	63	43	55	293	132	47	.....	.....	291
Belleville	76	107	.....	.....	191	34	43	8	50	169
Bowmanville	110	106	.....	.....	234	.....	154	60	.....	235
Brampton	169	156	.....	.....	325	.....	212	85	10	314
Brantford	75	99	100	.....	274	55	63	20	35	282
Cardinal	66	82	29	10	194	12	*120	32	2	212
Cayuga	143	54	17	5	225	81	145	3	18	282
Clifford	152	148	46	115	552	254	.....	16	20	431
Clinton	115	122	40	.....	277	4	225	.....	10	253
Cobourg	91	84	10	.....	210	.....	91	91	.....	196
Collingwood	60	126	.....	41	227	45	24	53	15	181
Durham	51	65	.....	.....	136	.....	72	6	25	135
Elmira	75	67	.....	34	183	41	83	38	10	191
Elora and Salem	52	42	.....	.....	94	67	.....	.....	5	97
Fergus	60	56	.....	16	134	75	.....	.....	10	118
Galt	206	137	103	44	508	228	73	46	33	502
Goderich	80	40	40	.....	160	.....	40	61	20	142
Grimsby	105	42	10	.....	158	.....	134	51	.....	193
Guelph	104	108	130	.....	346	91	120	109	.....	344
Hamilton	298	339	.....	.....	637	.....	308	335	46	806
Hespeler	72	63	.....	.....	135	28	48	37	7	140
Kincardine	122	110	.....	.....	251	.....	74	58	25	235
Kingston	291	209	.....	70	599	253	.....	.....	50	499
Lindsay	93	83	4	.....	182	12	71	54	20	177
London	202	404	.....	.....	801	.....	324	117	.....	817
Midland	91	56	.....	.....	147	.....	48	51	.....	123
Millbrook	57	57	15	.....	129	.....	76	23	.....	137
Mitchell	111	101	.....	.....	213	.....	132	55	10	205
Napanee	67	70	.....	.....	162	.....	125	33	25	196
Newmarket	83	80	75	30	307	128	.....	.....	25	307
Oakville	102	77	.....	.....	179	.....	48	10	15	186
Ottawa	1,010	725	.....	.....	1,735	313	500	358	200	1,619
Owen Sound	110	108	76	18	341	128	46	58	15	311
Paisley	114	105	.....	29	250	188	.....	.....	20	251
Perth	164	122	49	.....	536	.....	207	118	.....	387
Peterborough	146	123	.....	.....	269	34	95	85	25	274
Picton	113	84	.....	.....	197	.....	148	5	20	194
Port Dover	35	60	43	.....	191	74	65	26	13	211
Port Elgin	52	48	.....	.....	101	100	.....	2	.....	104
Port Hope	78	66	.....	.....	145	.....	96	44	1	145
St. Catharine's	700	842	914	277	3,272	1,266	694	147	115	3,171
St. Thomas	115	68	25	.....	208	80	19	51	.....	209
Sault Ste. Marie	112	100	.....	.....	212	.....	60	55	25	187
Seaforth	141	139	20	.....	315	.....	236	36	10	305
Simcoe	69	65	.....	10	161	22	40	34	35	161
Smith's Falls	108	101	.....	.....	220	23	86	57	.....	185
Springfield	50	72	.....	.....	127	.....	.....	13	10	127
Stirling	62	47	.....	.....	110	*69	73	31	.....	183
Stratford	158	161	25	33	383	183	.....	.....	35	349
Strathroy	134	75	.....	30	241	94	92	10	25	297
Thornbury	82	52	.....	.....	134	8	68	41	10	140
Tillsonburg	100	83	25	41	273	85	*26	49	25	273
Toronto	197	397	.....	.....	717	60	46	156	50	650
Vankleek Hill	61	106	.....	50	233	128	30	15	.....	223
Walkerton	67	48	.....	.....	115	113	.....	20	20	173
Walkerville	145	100	50	.....	372	35	132	65	.....	256
Waterloo	148	143	.....	.....	296	.....	180	74	40	330
Windsor and Sandwich	203	250	350	.....	829	.....	609	199	.....	1,164
Woodstock	130	90	.....	.....	252	.....	169	77	20	361
Totals	8,275	7,813	2,239	908	20,756	4,543	6,824	3,280	1,200	20,882

*Spent on public parks, etc.

HORTICULTURAL SOCIETIES, 1908.

Name.	Expenditure in 1907, on which grant for 1908 is based.	Membership.		Legislative Grants.		
		1907	1908	1907	1908	1909
	$ c.			$	$	$
Amherstburg	new	.....	116	.....	100	90
Barrie	146 89	67	132	60	63	104
Belleville	275 59	94	76	133	107	61
Bowmanville	263 52	100	110	105	106	85
Brampton	380 67	155	169	133	156	120
Brantford	273 16	75	75	110	99	85
Cardinal	206 47	77	66	96	82	67
Cayuga	105 15	73	143	95	54	105
Clifford	424 39	102	108	138	148	141
Clinton	299 35	119	115	119	122	90
Cobourg	196 93	89	91	101	84	71
Collingwood	306 00	124	60	126	126	58
Durham	173 41	54	51	72	65	45
Elmira	160 83	68	75	56	67	64
Elora and Salem	98 30	43	52	59	42	36
Fergus	117 90	68	60	70	56	44
Galt	300 92	160	206	133	137	173
Goderich	63 22	66	80	63	40	55
Grimsby	88 94	52	105	46	42	74
Guelph	281 42	95	104	129	108	107
Hamilton	511 29	171	298	365	339	407
Hespeler	150 40	66	72	100	63	52
Kincardine	260 75	114	122	123	110	88
Kingston	476 15	230	263	189	209	189
Lindsay	173 49	104	93	81	83	67
London	437 17	241	202	388	404	337
Midland	97 90	85	91	76	56	54
Millbrook	134 62	59	57	64	57	47
Mitchell	231 57	112	111	97	101	78
Napanee	164 95	74	67	100	70	63
Newmarket	217 36	62	83	105	80	93
Oakville	173 91	86	102	78	77	71
Oshawa	new	.....	.....	.....	.....	* .....
Ottawa	1,043 56	377	1,010	690	725	1,133
Owen Sound	287 41	90	110	110	108	102
Paisley	212 75	136	114	109	105	90
Perth	287 24	128	164	154	122	135
Peterborough	266 97	147	146	133	123	104
Picton	183 55	98	113	84	84	77
Port Dover	173 01	41	35	84	60	57
Port Elgin	112 00	52	52	51	48	38
Port Hope	147 74	75	78	94	66	55
St. Catharine's	2,630 29	426	700	412	842	913
St. Thomas	153 31	77	115	76	68	80
Sault Ste. Marie	new	.....	112	.....	100	.....
Seaforth	306 51	160	141	165	139	110
Simcoe	155 80	66	69	93	65	56
Smith's Falls	229 74	111	107	146	101	73
Springfield	204 80	50	50	100	72	43
Stirling	106 95	51	62	71	47	59
Stratford	422 53	137	158	166	161	125
Strathroy	132 68	110	134	125	75	106
Thornbury	103 19	68	82	45	52	55
Tillsonburg	236 00	60	100	58	83	91
Toronto	746 68	168	188	317	397	294
Vankleek Hill	335 90	52	61	50	106	70
Walkerton	95 54	63	65	75	48	57
Walkerville	new	.....	145	.....	100	100
Waterloo	344 51	144	148	158	143	117
Whitby	new	.....	.....	.....	.....	* .....
Windsor and Sandwich	643 21	223	203	244	250	319
Woodstock	214 34	93	130	104	90	119
Totals	16,968 83	6,288	8,088	7,524	7,813	7,799

* Grants for these 2 societies not yet apportioned.

PRESIDENTS AND SECRETARIES OF HORTICULTURAL SOCIETIES.

Society.	President.	Secretary.	Secretary's Address.
Amherstburg	Oscar Teeter, M.D.	Rev. Thos. Nattress	Amherstburg.
Barrie	Geo. Vickers	J. A. MacLaren	Barrie.
Belleville	S. J. Wedden	W. Jeffers Diamond	Belleville.
Bowmanville	Richard Jarvis	J. A. McClellan	Bowmanville.
Brampton	T. Thauburn	J. E. Cooper	Brampton.
Brantford	E. W. P. Jones	R. Walter Brooks	Brantford.
Cardinal	J. Bradley	E E. Gilbert	Cardinal.
Cayuga	W. Teasdale	W. J. Neale	Cayuga.
Clifford	D. Campbell	Jno. R. Scott	Clifford.
Clinton	M. D. McTaggart	Jos. Fair	Clinton.
Cobourg	Geo. M. Ferris	Major H. J Snelgrove	Cobourg.
Collingwood	W. A. Hogg	Jas. Guilfoyle	Collingwood.
Durham	Jos. A. Rrown	Chris. Firth	Durham.
Elmira	Geo. Klinck	C. W. Schierholtz	Elmira.
Elora and Salem	Wm. Findlay	Jos. W. Love	Elora.
Fergus	J. H. Dick	J. C. Templin	Fergus.
Galt	J. P. Jaffray	A. G. Elmslie	Galt.
Goderich	Jas. Mitchell	W. Lane	Goderich.
Grimsby	Dr. J. R. Smith	C. W. Vanduzer	Grimsby.
Guelph	T. J. Moore	Wm. Ross	Guelph.
Hamilton	J. M. Dickson	J. O. McCulloch	Hamilton.
Hespeler	G. W. Tebbs	J. E. Warren	Hespeler.
Kincardine	J. C. Cooke	Jos. Barker	Kincardine.
Kingston	Lt.-Col. R. E. Kent	A. W. McLean	Kingston.
Lindsay	Dr. F. Blanchard	Fred J. Frampton	Lindsay.
London	R. W. Rennie	W. W. Gammage	London.
Midland	Robert Irwin	Robert G. Nesbitt	Midland.
Millbrook	A. T. Armstrong	W. S. Given	Millbrook.
Mitchell	C. H. Eisler	A. J. Blowes	Mitchell.
Napanee	W. S. Herrington	Miss Jane E. Ham	Napanee.
Newmarket	G. E. Martin	Wm. Keith	Newmarket.
Oakville	Capt. E. A. Morden	J. Cavers	Oakville.
Oshawa		Wm. Merritt	Oshawa.
Ottawa	E. T. Mepsted	J. F. Watson	Ottawa.
Owen Sound	Wm. T. Lee	Miss Annie D. Stark	Owen Sound.
Paisley	Jno. Brown	F. E. Sheppard,	Paisley.
Perth	H. Taylor	W. J. Wilson	Perth.
Peterboro	Peter Campbell	H. L. Beal	Peterborough.
Picton	W. J. Carter	Walter T. Ross	Picton.
Port Dover	Jas. Symington	F. J. Taylor	Port Dover.
Port Elgin	J. J. George	W. A. Mitchell	Port Elgin.
Port Hope	H. Fulford	W. T. Greenaway	Port Hope.
St. Catharine's	W. B. Burgovne	Miss L. A. Radcliff	St. Catharines.
St. Thomas	K. W. McKay.	W. J. Shaw	St. Thomas.
Sault Ste. Marie	Jas. Darling	J. H. Hugill	Sault Ste. Marie.
Seaforth	W. D. Hoag	Jno. F. Daly	Seaforth.
Simcoe	H. H. Groff	J. Thos. Murphy	Simcoe.
Smith's Falls	Dr. McCallum	W. T. Ferguson	Smith's Falls.
Springfield	Rev. G. W. Andrews.	V. H. Chute	Springfield.
Stirling	Mrs. M. M. Potts	J. E. Morton	Stirling.
Stratford	C. C. Abbott	T. H. Lennox	Stratford.
Strathroy	W. G. Murray	R. F. Richardson	Strathroy.
Thornbury	Hy. Pedwell	Geo. Wright	Clarksburg.
Tillsonburg	V. A. Sinclair	W. W. Livingstone	Tillsonburg.
Toronto	H. R. Frankland	Chas. E. Chambers	Toronto.
Vankleek Hill	D. G. Mode	F. B. Bowden	Vankleek Hill.
Walkerton	A. B. Klein	Jas. Tolton	Walkerton.
Walkerville	C. J. Stodgall	Chas. D. Brown	Walkerville.
Waterloo	Christian Scheifele	J. H. Winkler	Waterloo.
Whitby	E. E. Starr	W. H. Wilcox	Whitby.
Windsor and Sandwich	Stephen Lusted	H. J. McKay	Windsor.
Woodstock	J. W. Armstrong	Wm. R. Vroman	Woodstock.

ANNUAL REPORT

OF THE

Bureau of Industries

FOR THE

Province of Ontario

1908

PART I.—AGRICULTURAL STATISTICS.

PART II.—CHATTEL MORTGAGES.

(PUBLISHED BY THE ONTARIO DEPARTMENT OF AGRICULTURE, TORONTO)

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

TORONTO:
Printed by L. K. CAMERON, Printer to the King's Most Excellent Majesty.
1909.

Printed by WARWICK BROS & RUTTTER, Limited,
TORONTO

To the Honourable John Morison Gibson, K.C., LL.D., *etc., etc., etc.*
Lieutenant-Governor of the Province of Ontario.

May it Please Your Honour:

The undersigned begs to present herewith for the consideration of Your Honour the Report of The Ontario Bureau of Industries for 1908.

Respectfully submitted,

JAMES S. DUFF,
Minister of Agriculture.

Toronto, 1909.

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Ontario Bureau of Industries.

PART I.—AGRICULTURAL STATISTICS.

THE WEATHER.

Under their respective headings, summary table of temperature, precipitation, and sunshine are herewith presented, as prepared at the Meteorological Office:

TEMPERATURE. The following table gives the temperature of the Province in each month for the last ten years, together with the mean annual temperature, also the mean temperature for the six months April-September—practically the growing season—together with the average for the twenty-seven years, 1882-1908:

Month.	1908	1907	1906	1905	1904	1903	1902	1901	1900	1899	1882-1908
	°	°	°	°	°	°	°	°	°	°	°
January	18.7	16.9	26.6	13.6	10.8	18.5	18.7	19.0	21.9	18.7	17.4
February	14.8	13.1	18.4	12.7	8.8	21.8	18.1	13.0	17.1	15.2	17.2
March	28.1	31.0	23.4	27.2	26.2	37.4	35.0	26.9	20.5	25.8	26.7
April	39.9	36.4	43.3	41.1	37.5	43.3	43.6	45.0	44.8	44 5	41.4
May	55.8	47.3	53.5	52.7	56.1	56.8	53.2	54.6	54.6	55.7	53.7
June	64.9	63.2	65.0	62.8	63.3	60.8	59.2	65.8	64.1	64 8.	63.9
July	69.4	67.3	68.2	68.7	66.2	67.3	68.6	71.9	68.2	67.5	68.0
August	65.4	63.7	70.0	66.1	63.3	62.4	63.5	67.5	70.9	68.5	64.7
September	63.0	59.5	63.3	60.9	57.2	59.0	59.0	60.1	62.3	56.2	59.0
October	49.4	44.1	47.6	47.5	45.0	49.2	46.3	48.5	55.2	50.0	46.7
November	36.9	34.3	35.0	33.7	33.6	32.3	41.0	31.9	35.3	38.0	35.0
December	23.4	26.5	19.9	27.0	17.6	17.7	20.9	22 7	24.7	25.1	23.6
Annual mean	44.1	41.9	44.5	42.8	40.5	43.9	43.9	43.9	45.0	44.2	43.1
Mean for 6 months, April to Septemb'r	59.7	56.2	60 5	58.7	57.3	58.3	57.9	60.8	60.8	59.5	58.5

The mean temperature of the year 1908 was 44.1 degrees, being 2.2 degrees higher than that of the preceding year, and 1.0 degree higher than the mean temperature for the twenty-seven years.

The average temperature for the six months, April-September, was also higher than usual, being 1.2 degrees above the average. February, April and December, were the only months which were below normal. September was the warmest month relatively, being 4.0 degrees above its average, and February the coldest, with 2.4 degrees below.

SUNSHINE. In the following table the average of sunshine are, as usual, derived from the records of the weather stations at Woodstock, Toronto, Lindsay, Kingston, and Ottawa:

Months.	Sun above horizon	1908.	1907.	1906.	1905.	1904.	1903.	1902.	1901.	1900.	1899.	1882-1908.
January	285.7	92.3	65.5	88.6	80.6	71.0	54.4	81.1	59.7	77.1	90.8	75.0
February	291.4	120.9	116.6	135.4	116.1	109.0	90.9	127.7	115.7	109.8	112.8	104.2
March	369.9	95 2	127.1	133.0	157.7	109.2	99.8	138 8	96.9	161.4	133 2	141.6
April	406.4	177.3	155.9	201 6	169 8	124.6	181.7	144.1	154.5	214 0	223.2	187.0
May	461.1	188.2	219.9	218.6	206.5	211 4	284.1	207.8	177.3	247.9	210.9	216.8
June	465.7	332.9	230.8	228.8	210.4	228.9	196.0	199.3	365.5	305.3	278.2	244.7
July	470 9	295.4	265.7	270.3	236.8	237 3	261.2	241.5	268.2	266.3	302.2	265.4
August	434.5	263.3	252.2	255.7	261.6	256.6	180 6	245.2	206.0	272.4	262.1	242.9
September	376 3	177 0	129.6	237.7	191 6	172.8	203.7	149.3	199.7	190 0	164.4	187.2
October	340.2	162.3	153.9	125.7	151.8	124.4	152.4	119 1	163.0	164.0	141.7	140.1
November	286.9	72 1	63.0	84.2	95.9	100.1	114.0	76.6	80.3	82.4	78.6	78.1
December	274.3	61.6	46.8	65.6	63.8	60.9	59.5	71.0	62.9	46.6	60.2	60.1
Total for the year	4463.3	2038.5	1827 0	2045.2	1945.6	1806.2	1881.3	1799.5	1852.7	2186.2	2058.3	1943.1
Total for 6 months, April-September	2614.9	1434.1	1254.1	1412.7	1279.7	1231.6	1310 3	1187.2	1274.2	1491.9	1411.0	1344 0

The year 1908 had 2,038.5 hours of sunshine, or 95.4 hours more than the average for the last twenty-seven years. The six growing months, April-September, however, had 14,134.1 hours of sunshine, or 90.1 more than the period, 1882-1908. The five months, March, April, May, September and November, were below average, March being the lowest with 46.4 hours; all the others were above, June being especially high, with 88.2 hours more than average for the twenty-seven years' period, 1882-1908.

PRECIPITATION. The fall of both rain and snow for the five winter months, including November, 1907, and March, 1908, is given in the following table for ten years, together with the average for the twenty-seven years, 1882-1908. An inch of water is the equivalent of ten inches of snow:

Year.	November.		December.		January.		February.		March.		Total for five months.	
	Rain.	Snow.	Rain.	Snow.	Rain.	Snow.	Rain.	Snow.	Rain.	Snow.	Rain.	Snow.
1908	2.61	6.0	2.12	26.3	0.48	24.0	1.02	31.6	1.66	7.6	7.89	95.5
1907	1.92	3.7	1.80	16.3	1 85	15.6	0.14	15 8	1.64	7.8	7.35	59 2
1906	1.96	6.0	1.22	8.8	1.31	10.2	0.46	8.1	1.13	11.6	6.11	43.7
1905	0.33	4.3	0.55	14.6	0.22	23.2	0.06	20.5	0.98	3.6	2.14	66.2
1904	0.98	7.2	0.71	24.1	0.48	21.9	1.04	14.7	1.78	9.4	4.89	80.3
1903	1.60	4.0	1.06	14 6	0.78	19 8	1 81	13.6	1.92	1.7	6.67	53.7
1902	1 25	8.0	1.85	8.6	0 10	20.4	0 56	12.1	2 34	2 5	6.10	57.2
1901	2.99	10.4	2.15	14.5	0 58	18.8	R	17.6	1.00	13.1	5.68	63.5
1900	1.13	1.0	0.74	24 6	0.72	15.8	1.68	26.8	0.53	18.8	6.21	76.9
1899	1.67	9.6	1.73	17.5	1.50	13.2	0.76	18.9	1.78	22.1	6.45	77 5
1882-1908	2.00	7.7	1.31	15.4	0.96	20.1	0.85	16.7	1 21	10 5	6.35	70.1

The total amount of rainfall for the five months, November-March, was 7.89 inches, or 1.54 inches above the average for the same period for the twenty-seven years, 1882-1908. December had 2.12 inches, or 0.81 inches above the average. The total snowfall was 95.5 inches, or 25.4 inches more than the average for the five months. February recorded 31.6 inches, or 14.9 inches more than normal.

The six months, April to September, however, comprise what is regarded as the growing season for most crops, and the following table gives the rain-

fall of these months for the last ten years, and also the average for the twenty-seven years, 1882-1908:

Months.	1908	1907	1906	1905	1904	1903	1902	1901	1900	1899	1882-1908
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
April	2.27	2.27	1.41	1.04	2.22	2.32	2.12	2.26	1.44	1.10	1.60
May	3.97	2.24	2.34	3.32	3.36	1.82	2.44	3.67	2.03	3.43	2.85
June	2.47	2.90	4.52	3.53	3.20	3.83	3.92	2.14	2.83	2.46	2.96
July	2.85	2.86	2.93	3.55	3.50	4.09	5.49	3.90	3.96	2.78	2.94
August	2.74	1.00	2.57	3.26	3.76	3.77	2.02	2.78	2.15	0.81	2.58
September	1.23	3.85	2.41	2.42	3.24	2.21	3.53	2.78	2.73	3.72	2.65
Total for six months	15.53	15.12	16.18	17.12	19.28	18.04	19.52	17.53	15.14	14.30	15.64

The rainfall for the six months, April-September, comprising the growing season, was 15.53 inches, or 0.41 inches more than 1907, but when compared with the period 1882-1908 it is just about normal. April, May and August were above the average, May being 1.12 inches in excess; June, July and September were below average, September having a deficit of 1.42 inches.

STATISTICS OF FIELD CROPS.

The following table gives the acreage, production and market value of the field crops of Ontario for the year, 1908. Detailed tables showing the statistics by counties will be found elsewhere in this report.

Crops.	Acres.	Bushels.	Bushels per Acre.	Market Value.
				$
Fall Wheat	679,642	16,430,476	24.2	14,649,061
Spring Wheat	142,124	2,197,716	15.5	1,996,230
Barley	734,029	20,888,569	28.5	10,943,788
Oats	2,774,259	96,626,419	34 8	38,987,985
Peas	396,642	7,401,336	18.7	6,121,449
Beans	46,477	783,757	16.9	1,160,103
Rye	87.908	1,453,616	16.5	1,012,953
Buckwheat	140,605	3,323,668	23.6	1,799,890
Corn (for husking)	299,690	23,601,122	78.8	9,440,336
Potatoes	166,974	18,517,642	110.9	8,874,201
Carrots	4,080	1,120,143	274.5	140,018
Mangel-wurzels	67,937	29,870,966	439.7	2,389,677
Turnips	120,920	41,210,189	340.8	4,121,019
Sugar Beets	17,453	7,004,748	401.3	840,570
Mixed grains	456,049	15,354,350	33.7	8,444,893
		tons	tons	
Corn (for Silo)	233,753	2,729,265	11.68	5,458,530
Hay and Clover	3,253,141	4,635,287	1.42	47,696,579
Total	9,621,683			164,077,282

The acreages devoted to other crops were as follows;—Orchard and small fruits, 326,550; vineyards, 11,705; pasture (cleared), 3,326,169; rape, 40,208; flax, 8,562; hops, 1,772; tobacco, 1,806.

VEGETATION.

The spring promised to open early, but cold wet weather prevailed later and delayed growth. As correspondents wrote under date of May 18th, however, warm rains with bright weather was rushing vegetation along, and although growth was a week or two later than in some seasons, it was nearly a week earlier than last year. Grass was relatively more advanced than tree growth.

Spring Seeding. In the Lake Erie district seeding was almost completed by the middle of May, and in some of the other western counties work was also well advanced, although hindered somewhat by rain. In the eastern half of the Province, more particularly in the St. Lawrence and Ottawa counties, heavy rains had kept farmers off the land, except in most favorably situated places, and much spring sowing remained to be done. Early in the season the land everywhere was in more or less good tilth, but in many sections the wet weather later had made the soil rather sad and lumpy for best results. The bulk of the seed sown caught nicely, and with favorable weather continuing, it was then expected that spring grains would get off to a fair start. Fears were expressed by some correspondents that corn, potatoes, and roots would be rather late in planting.

THE GRAIN CROPS.

Fall Wheat. The following concerning the new fall wheat appeared in the crop bulletin issued in November, 1907: "The acreage of new fall wheat will be somewhat increased in the Lake Erie and Georgian Bay counties, but will be about the usual extent in the other parts of the Province. Seeding was done a little later than usual, owing to the late harvest, but while operations ranged from the end of August to the third or fourth week of September, most of the crop was got in during the second week of September. It has had an excellent start, but while green and healthy looking as correspondents wrote, there was hardly as much top as was desirable to ensure its taking the risk of an open winter. About forty varieties are reported as being grown, Dawson's Golden Chaff still being by far the favorite."

While correspondents were not nearly unanimous, the general tenor of reports in the following May regarding fall wheat was favorable. In most cases the crop entered the winter a little short in top, but snow fell early, and lay on the ground nearly all the season, thus affording good protection, except on knolls, where the young plants were exposed, and in some of the fence corners where the crop was smothered. Early sown wheat did better than that put in later, and the crop did best on rolling land. The greatest injury to the growing wheat was caused by the ice forming in low places during the wet and cold days of the latter part of March and the beginning of April, resulting in a number of patchy fields. It was expected that only a small area would be plowed up, and that most of the thin or bare spots would be sown to spring grains, chiefly barley, in order to save the catch of grass. The lesson of the season was the old one of the benefit of drainage, as several correspondents pointed out that most of the injury to the crop occurred on low-lying and undrained land. There was but little difference to note in the condition of fall wheat in the various districts, although the best showing was credited to the Lake Erie counties.

Fall wheat was thus referred to in the August bulletin: "This crop has yielded well, but owing to the wet, warm weather prevailing at the time of harvesting, considerable sprouting occurred while the grain was

stooked. A fair portion of the crop was cut early, and was got in in first-class condition, and in such cases the grain is said to be plump, hard, and of good weight. The straw was rather short, but stood up well, and only slight rust is reported. Scattered mention of the Hessian fly was made, but much less than in recent years. Special mention is made by correspondents of injury to wheat fields by sparrows. Cutting ranged from the second week of July to the end of the month."

November reports were to the effect that some of the grain sprouted in the shock owing to the warm, wet weather at harvesting; but taking the crop as a whole, fall wheat might be classed as generally plump and of good quality, with a yield above the average.

The New Fall Wheat. The bulletin issued in November, 1908, thus referred to the fall wheat then about to enter the winter: "While some correspondents report an average or an increased acreage of new fall wheat in their respective localities, a larger number of returns show a decided shrinkage in area, ranging from 10 to 25 per cent. This decline in acreage is attributed mainly to unusually dry fall weather, which caused many farmers to delay putting in all the wheat they had planned for until it was too late. Sowing ranged from the 25th of August till the middle of October. Some of the seed sown in August did not germinate until late Setpember or early October rains fell, and many 'patchy' fields are reported. Summer fallows as a rule made a fair catch, and came along nicely; but fall wheat sown on stubble land was very dry, and growth was unusually backward. Much of the young wheat had so little top that fears were expressed of its successfully tiding over the winter. Scattered reports have been received of injury from the Hessian fiy, but the situation in this respect is a marked improvement upon that of the last three or four years. Some forty-five varieties of fall wheat are named as being grown. Dawson's Golden Chaff still being the favorite."

Spring Wheat. August reports led to the opinion that spring wheat would not be of as good general quality as the fall variety. It was short in straw, thin on the ground, and the grain was very uneven both in quality and in yield, come very good and some very poor returns being reported. Harvesting began in some parts of the Province as early as the 20th of July, but in some sections the crop would not be got in for nearly a month later.

The following appeared in the November bulletin: "The acreage of spring wheat is steadily decreasing. While there was an average yield, considerable shrunken grain was reported. Spring wheat, however, is becoming more popular in mixtures with other grains."

Barley. The condition of the barley crop was thus described in the August bulletin: "In Western Ontario the yield of barley has been large, and the crop is regarded as a satisfactory one generally, as the discoloration of the grain is not so serious a matter as it was before the bulk of the crop was fed to live stock. In Eastern Ontario, however, the yield has been rather light and uneven, ranging from 5 to 30 bushels per acre in some of the former banner barley counties near the Bay of Quinte. The hot weather just before ripening is blamed for this injury by some correspondents, while others attribute it to the heavy rains occurring in the early part of the season and hardening the soil. Like other cereals, the crop is short in straw, but there is much less rust than was expected from weather conditions. The bulk of the crop was cut in the last week of July and the first week of August."

According to November returns, a considerable quantity of barley was rather dark in color, although very good for stock feeding, which is now the chief use for this grain in Ontario. In the western half of the Province barley yielded well, and the grain was of fair weight. In the eastern counties early sown did well, but late barley was poor.

Oats. The prospects of oats about the middle of August were thus given in the crop bulletin issued in that month: "Except in the St. Lawrence and Ottawa counties, and in the northern districts, the yield of oats will be fully up to the average, and on the whole the grain will be much plumper than in the case of last year's crop. Frequent rains at the time of harvesting — and much of the crop was in the shock as correspondents wrote—may detract from the value of the oat crop, as sprouting was threatened, and the straw also was likely to be affected by the wet so far as its feeding value is concerned. In the eastern half of the Province rust was frequently complained of, but in the more western counties much less mention was made of this trouble. Grasshoppers also attacked the oats in some of the eastern counties and in the northern districts. While some fields were harvested as early as July 20th, some oats had yet to be cut or housed as correspondents reported. Some of the largest yields of oats and of barley ever reported to the Department have been received this year from the county of Bruce."

November reports stated that dry weather at the time of filling caused oats to be rather light in weight, and those fields which were harvested late were caught by rain, causing considerable rust and otherwise injuring the straw for feeding purposes. While the total yield of oats is larger than that of 1907, it is less than in any of the five years immediately preceding.

Peas. A considerable portion of this crop remained to be pulled when correspondents reported in August, but the prospects then were that the yield would be about an average. Frequent rains prolonged blossoming, or there would have been an earlier and fuller yield, although some complain that the crop ripened too rapidly owing to the great heat. The weevil or "bug" was less in evidence than for years, but a green aphis, closely resembling the turnip louse, was very injurious to pea fields in the Lake Ontario and adjoining districts.

The November bulletin said that peas were poor on late fields, but where got in early they did well, although there were some complaints of the crop ripening unevenly. While the presence of the pea weevil was reported from different localities, the pest was not nearly so bad as in more recent years; but a green aphis attacked the vines and did considerable injury, more especially in the eastern part of the Province.

Beans. Field beans were yet growing when returns came to hand about the middle of August, and some correspondents were fearing a second growth on account of rain, although other reports were much more reassuring. The prospects were for an average yield in those counties where beans are most largely raised.

The November statement regarding beans was that yields are reported at being from poor to good, but in most cases the quality is well spoken of, notwithstanding the fact that the warm, dry summer hastened ripening. There was most favorable weather for harvesting.

Rye. This crop is not largely grown for grain, but where raised is usually cut green for feed, or for turning under. According to August estimates the yield varied from 10 to 22 bushels per acre, and is of good quality.

Buckwheat. "Notwithstanding the hot and dry weather during the growing period of this crop," said the November bulletin, "followed by heavy rain and hail storm in the second week of August which beat many fields down, buckwheat may be classed as a good crop, both as to yield and quality, and several correspondents are of opinion that it is going to be more largely grown next year."

Corn. The August bulletin contained the following: "Favorable reports concerning corn come from every district in the Province, more especially in the case of corn grown for fodder and the silo. As usual, there are a number of complaints regarding poor seed and consequent replanting; but warm, moist weather during the summer caused the plants to make a rapid growth, and should frost hold back until the corn is cut it will be the best crop of the year, and the best crop of corn for many years."

November returns were even more favorable in their references to the corn crop. The bulletin said: "This has been the most successful crop of the season, and the best of its kind for many years, taking both yields and quality into consideration. The warm, dry weather, which affected nearly all the other field crops more or less adversely, seemed only to add to the growth of corn. The crop was good both for husking and the silo, although a little more rain at earing time was wished for in some localities. Injury from frost was very small, only a few very late fields being nipped."

Mixed Grains. Correspondents report for the first time upon the growing of mixed grains. The favorite grain mixture is one of barley and oats; oats and peas, and barley, oats and peas come next. Oats, barley and wheat are also used by some; also oats and wheat, and wheat, peas and oats. Oats and spelt, oats and buckwheat, and oats and flax also have their advocates as grain mixtures. Some who have tried mixed grains speak unfavorably of results, but most of those reporting are more or less strongly favorable to their use. It is claimed that these grain mixtures provide well-balanced and nutritious feed for all classes of live stock at less trouble and expense than by any other method. By sowing peas with the cereals the combined crop can be cut with the binder. The values of these mixtures depend upon the various grains ripening about the same time. Daubeney oats, Mandscheuri barley, and Goose wheat are the favorite varieties for mixture.

HAY AND CLOVER.

Clover. "Correspondents are much divided in their opinion regarding the condition and prospects of the clover crop," said the May bulletin, "descriptions ranging from 'excellent' to 'poor.' A number of the returns from the Lake Erie district claim that the fields never looked better at this season, and other western counties send more or less cheerful reports; but some of the returns from the eastern half of the Province are far from encouraging, although a number of good fields are also reported. The drouth of the early part of last summer hindering a successful 'catch,' the too close pasturing of fields by live stock in the fall owing to the scarcity of fodder, and the trying effects of the frosts of early spring on low and wet spots, are given as the chief causes of failure by those who report unfavorably. Very little will be plowed under, as the warm rains falling as correspondents wrote were reviving the fields wonderfully. Several correspondents speak of alsike as doing much better than red clover."

The August bulletin said: "The poor catch of grass seed last year, and the too close cropping of meadows owing to the scarcity of fodder in the fall, made the outlook for this season's hay crop far from encouraging when the snow fell. However, the fields came through the winter in good shape, and the first part of the season gave promise of a large yield of hay; but dry weather set in early in June and the crop did not go forward as well as was expected. Most of the hay was cut and housed in first-class condition, but a considerable portion was caught by rain after cutting, and has suffered in quality. A number of large yields are reported along with some very light returns, sometimes in the same localities. The western half of the Province makes a good showing both as to the bulk and quality of hay, but the more eastern districts are below the average in yield. Taking the Province over, however, there will be a fair quantity of good hay in the barns this winter both for home and outside supply."

Clover Seed. Early in the season the second growth of clover gave promise of a good yield, but the dry weather prevailing from the middle of August until the latter part of September forced many farmers to turn their cattle upon the fields reserved for clover seed. The midge was more prevalent than usual, and did much injury to the heads. While a few correspondents spoke of large yields of seed, the general yield will be less than an average, although of good quality. Alsike did better than red clover.

Alfalfa. This crop is rapidly coming into favor for hay and pasture purposes all over the Province. There has been a danger of pasturing too closely, but as farmers get better acquainted with its character and possibilities more satisfactory results are expected. The fact that the plant does well on hard clay and other heavy soils commends it to some, and the quality of withstanding drouth so well is also in its favor.

FIELD ROOTS.

Potatoes. Said the August bulletin: "Potatoes promise better both as to yield and quality than for the last three years. Those put in early have been disappointing, but late planted are giving promise of a liberal yield. References to blight come from various parts of the Province, but some correspondents say that spraying for this trouble is being more practised by growers. Only a small portion of those reporting fear rot."

While some correspondents in November reported a heavy crop of potatoes, the bulk of the returns indicated a yield a little less than the average, owing to the unusually dry season. Reports, however, were practically unanimous as to the excellent quality of this year's potatoes, their freedom from rot being frequently commented upon. The ground was hard for digging, but otherwise the crop was most satisfactorily secured for the winter.

Carrots. Field carrots are not now largely raised, but where grown they were a very fair crop, more especially as regards quality.

Mangel Wurzels. According to the August returns, mangels were rather thin in stand, but were vigorous looking in top, bulky in roots, and promising, generally.

November reports were thus summarized: While not so large in size as usual, owing to the drouth, mangels have yielded much better than turnips, and are of good feeding quality. Excepting the dry, hard condition of the soil when taken up, they were harvested and stored under very favorable conditions.

TURNIPS. When the August returns were made turnips were not considered to be in as good condition as mangels, as they suffered considerably from lice, but their general condition was greatly improving as correspondents wrote.

Referring to turnips, the November bulletin said: "These roots have been more or less a failure this season, although here and there a few good fields were reported. Not only did turnips, like other roots, suffer from drouth, but lice appeared upon the plants to a greater extent than usual, and in some fields they almost destroyed the crop. Some turnips remained to be housed as correspondents wrote."

SUGAR BEETS. This class of roots were rather light in yield, but were of good quality, both for factory purposes and for stock feeding.

MISCELLANEOUS.

FLAX. The acreage of flax was not so large as in former years, but the quality of both seed and stalk is classed as good, although the latter is rather shorter than usual, and in some localities was somewhat lodged by heavy rain storms.

TOBACCO. There has not been as much tobacco planted as usual. The cold spring kept the plants backward, and frequent rains in July also told against the crop, and at the best only a fair return of medium quality is looked for.

November reports concerning tobacco were meagre, and are to the effect that there is less of the crop raised than in recent years. Heavy rains, followed by very hot weather, did considerable injury to the plants.

WEEDS. Several correspondents in their May returns made a general reference to the prevalence of weeds, but the following special mention of the sow thistle by a correspondent in the township of Whitchurch, in the county of York, is of a most serious nature:

"The perennial sow thistle is gradually, but apparently permanently, getting a foothold throughout the district. In fact, at present many farms are nearly ruined by it, and even the best of farmers are having a desperate fight to hold it in check. Unless some change takes place, as a few dry years, or some other condition, we are up against a very difficult problem."

FALL PLOWING. Reports sent in under date of November 4th were thus summarized: "Owing to the unusually dry weather reaching almost unbrokenly from the 16th of August to the 26th of October, the land was so baked, especially clay soils, that very little plowing was done. Operations were pushed through on stubble land, but even there progress was slow; while, to quote a correspondent, sod conditions made plowing 'practically prohibitive.' What plowing was done before fall rains came was very trying upon horses. Only about two-thirds of the usual acreage of land had been turned under up to the close of October, but with most of the other fall work cleaned up, and the soil then nicely moistened, it was believed that a couple of weeks of open weather would enable most farmers to catch up with their plowing."

THRESHING AND MARKETING. The November bulletin said: "The shortness of straw, the open weather, and improved machinery, combined to hurry along threshing. While in a few localities there was still some unthreshed grain, operations were practically completed by the end of October in most

parts of the Province, and some were through by the beginning of the month. Good roads favored marketing, and fair prices were enticing, but with the exception of a portion of the wheat and oats surplus most of the grains raised will be fed to live stock, and, in the language of a correspondent, 'marketed on the hoof.' Of course a marked rise in the price of grains would bring out a ready and large response."

Farm Improvements. A fair amount of tile draining has been reported, and more would have been done but for the high price of capable labor, and the dry, hard condition of the soil. A considerable number of substantial farm houses of modern design have been erected, and some splendid bank barns have also been built, while all over the Province many old houses and barns have been remodelled and brought more up to date. In barn building the use of cement figures largely, both for foundation and for flooring. The old zig-zag rail fences are fast disappearing, even in the more remote sections of the Province, straight, neat-looking woven wire fences taking their place.

FRUIT AND FRUIT TREES.

The general condition of fruit trees was thus described in the May bulletin: "Orchards have come through the winter in good condition, having suffered less than usual from severe cold, ice storms, mice, etc. The San José scale and the oyster-shell bark louse are reported at various points, but the spraying campaign is being more vigorously entered upon than ever, and more attention generally is now being paid to orchard trees. Fruit buds promise a good yield should rain hold up during the period of bloom. In short, the spring outlook was never better for Ontario fruit."

The August bulletin has the following to say regarding fruit: "The spring outlook for orchard products was very promising, but in the case of apples and peaches there has been considerable disappointment, as the varieties most in demand will be scarce, while there are more than enough of the less valuable sorts. For instance, summer and fall apples are plentiful, the Duchess going abegging for buyers in some districts, but Spys and other standard winter kinds will be very scarce. There are a number of complaints of wormy fruit on account of codling moth, and the tent caterpillar, oyster-shell bark-louse, and twig blight have also done injury. But while apples and other tree fruits were smaller in size than usual last year, owing to the midsummer drouth, this season the generous rains of July have reversed conditions, and several correspondents call attention to the fact that these fruits at the present time are uncommonly large. Pears have yielded fairly and in some districts abundantly, but considerable blight has been reported. Plums have given a fair yield, but the curculio has been very active this season, and the fight with black-knot is still going on. Crawford peaches will be scarce, but some less popular varieties are fairly abundant, the later kinds more especially. Cherries yielded well, but the robins and other birds were very injurious to the growing crop, and black-knot is relentlessly attacking the trees. Grapes give promise of an immense yield, and the rose bug is mentioned chiefly to note its absence. Small fruits generally were a good average crop."

November reports were to the following effect: "Orchards suffered from the extended drouth in the latter part of the growing season, and a few trees succumbed. San José scale and oyster-shell bark-louse are reported as doing injury to fruit trees, more especially in Western Ontario, and the codling

moth was responsible for considerable wormy fruit; yet, taking it all together, orchards may be described as being in ordinary condition. Several correspondents point out that one effect of the drouth is the tendency of apples to ripen prematurely, thus affecting their keeping qualities. The drouth also caused many fall and winter apples to drop before picking time. There were plenty of fall apples, but a scarcity of the best winter varieties. A number of correspondents refer to the Fameuse or Snow as being abundant, and as being freer from spot than usual. Peaches, pears and plums were in fair supply, and grapes and small fruit generally gave generous yields."

LIVE STOCK AND THE DAIRY.

Live Stock. The May bulletin contained the following: "All classes of live stock faced the winter with a poor prospect of fodder supply, as hay and grain were scarce and dear. In order to meet the situation a large number of horses, cattle, and swine were sold at sacrifice prices, but even then fears were expressed by some as to the possibility of bringing the remaining animals through in any form better than that of mere sustenance. It is the general opinion that the average condition of live stock is much better than was expected, and the skilful and provident handling of fodder supplies has shown that Ontario farmers as a class are well capable of meeting such an emergency. No disease of an epidemic nature has been reported amongst live stock. Horses are described as being rather thin, but they are in fair working condition. Aside from mild forms of distemper, and indigestion attributed by some to so much chaffy stuff having to be eaten, they may be counted as being in good general health. Some correspondents complain of too many old horses being kept. Cattle have not fared so well as horses, and, as a rule, were quite thin when turned on the grass. A few correspondents complain that lack of straw for bedding has resulted by some cattle being affected by a stiffening of the limbs. It is also claimed that more barrenness has prevailed amongst cows, and that a larger proportion than ordinarily of those calving have died. The general opinion is that fewer cattle than usual will be exported this year. Fat stock are scarce, and store cattle are not so plentiful as in more recent years, although a few correspondents claim to have the usual supply of stockers on hand. One return is to the effect that it will be another year before Ontario cattle conditions will right themselves. Sheep have done better than any other class of farm animals, and have been fortunate in lambing. Some complaints are made of "grub in the head," and the dog nuisance is referred to several times. Swine are thin, and are not to be found in as large numbers as last year. So many brood sows were sold just before the winter, owing to the scarcity of feed, that it is doubtful if the fall delivery of bacon hogs will be anything near the record of more recent years. A form of crippling among swine, by some correspondents attributed to rheumatism, is reported in various localities. The good growing weather of the middle of May was greatly welcomed by owners of live stock, and many young animals were then on the grass."

The following appeared in the August bulletin: "Pastures are in good condition except in Renfrew and one or two other St. Lawrence and Ottawa counties, and in the Northern Districts. Most of the live stock are consequently in good form, even though they have been put on the grass in much thinner condition than usual owing to the scarcity of fodder last winter. All classes of farm stock are remarkably free from disease, the only serious fea-

ture reported being the unusually large number of cows that failed to come into calf this season. This, coupled with the fact that many dairy cows were sold for beef last fall and winter, means that a scarcity of milkers will continue. Flies were very annoying in many parts of the Province. The flow of milk was fairly steady during the summer, and was keeping up well as correspondents wrote. The quantity of milk this year, however, will be less than that of last season, owing to fewer cows being available; but good prices have brought a ready market for both butter and cheese, and so far the season has been regarded as a favorable one for the dairy. From present appearances, there will be more than a sufficiency of fodder for the fall and winter keep of live stock."

Live stock conditions were thus presented in the bulletin issued in November: "The unusually dry fall weather allowed but little growth of grass, and pastures were eaten very closely. Live stock are, consequently, rather thin, but are quite vigorous and remarkably free from disease. Most of the export cattle have been shipped, and not so many animals for fattening are on hand as is generally the case at this time of the year. Sheep did well where kept, but do not appear to be increasing in popularity. Swine have been marketed steadily, but prices were dropped as correspondents wrote, and the opinion was frequently expressed that at the present cost of grain and other feed there was little or no profit in raising pork. It was also claimed that there are less young pigs on hand than is usual at this time of the year. The silo is growing in favor; several correspondents refer to it as being the "salvation" of present day agriculture. On many farms there was a scarcity of water for a while, owing to the drouth."

The Dairy. According to reports, the flow of milk affected by the prolonged drouth that set in in the latter part of August, and the quantity of both butter and cheese made in the fall was less than usual. Prices for dairy products, however, were strong, as the quality of both butter and cheese was up to the mark. In most instances, dairymen were well able to meet conditions, owing to the experience gathered from last year's fodder failure. While some cheese factories in Eastern Ontario were forced to close a month or more earlier than usual owing to the decreased milk supply, correspondents, as a rule, appeared to be more or less confident regarding the general dairy situation. Several correspondents emphasized the need of paying more attention to the careful selection of milking strains for the dairy herd. Holsteins now appear to be the favorite breed as milkers, more especially for cheese factories, Shorthorns and their grades coming next; although Ayrshires are second in the cheese-making counties of the St. Lawrence and Ottawa district. Jerseys are in good favor where butter is made.

Fodder Supplies. The prospects for wintering live stock were thus summed up in the November bulletin: "The hay crop is nearly one-fifth larger than that of last year, while the immense yield of corn also means a saving of hay and other more expensive fodders. Last year's experience, also, has made many farmers wise to the fact that it is sometimes better to dispose of the poorer animals of the herd than to winter them by purchasing expensive feeds. In this connection, it is interesting to note that while hay has been selling at from $6 to $14 a ton, and a year ago ranged from $10 to $20 a ton, the prices of bran and shorts are but little below their last year's figures. Straw is not so good as usual either in length or quality, much of the oats and other grains being caught by rains when cut. The feeding of live stock is almost a month earlier than in ordinary years, and will help to make an inroad into supplies if the winter proves to be a severe one. Several correspondents in the Northern Districts tell of losses to the hay crop

by beaver meadows being burnt over from bush fires. Taking the Province all over, however, farmers are much more fortunately situated than they were a year ago so far as fodder supplies are concerned."

Poultry. Farmers are paying more attention to the raising of domestic fowl. Eggs have commanded high prices all season, and more attention is being given to the selection and care of good layers. Farmers at present are relying more upon the eggs than upon the meat for profit in poultry raising. Some reports are to the effect that chickens are likely to be scarcer than usual owing to the great demand for eggs.

Statistics. The following table gives the total numbers and value of the several classes of live stock on hand on July 1, 1908, together with live stock sold or slaughtered in the year preceding that date. The figures by counties are given in later tables.

Live Stock.	Live stock on hand, July 1, 1908.		Sold or slaughtered in year ending June 30, 1908.	
	No.	Value.	No.	Value.
		$		$
Horses (all ages)	726,471	85,847,391	71,214	8,878,225
Cattle :—				
Milch cows	1,113,374	41,083,586	798,062	27,733,956
Other cattle	1,711,485	36,171,681		
Sheep and lambs	1,143,898	6,336,265	545,320	2,867,255
Swine (all ages)	1,818,763	12,135,979	2,129,944	21,600,459
Poultry (all kinds)	12,285,613	4,439,854	4,108,750	1,895,753
Total value	....	186,014,756	.....	62,975,648

Values per Head. The following table gives the average value per head of stock on hand for the past ten years :—

Classes of Live Stock.	1908	1907	1906	1905	1904	1903	1902	1901	1900	1899
	$	$	$	$	$	$	$	$	$	$
Horses (all ages)	118	117	116	110	104	97	88	81	76	69
Cattle :—	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Milch cows	36 90	36 43	35 99	35 06	34 70	34 15	32 96	31 74	31 01	30 31
Other	21 13	21 15	21 62	21 29	20 84	20 58	19 46	18 57	17 93	17 41
Sheep (all ages)	5 54	5 36	5 15	4 68	4 41	4 40	4 45	4 41	4 29	4 13
Swine (all ages)	6 67	6 92	7 02	6 44	6 43	6 59	6 69	6 23	5 42	5 16
Poultry (all kinds)	36	36	36	34	33	31	30	29	29	28

FARM LABOR AND WAGES.

The August bulletin thus referred to labor and wages on the farm: "There has been a sufficiency of ordinary farm help, but first-class agricultural hands are as scarce as ever. Harvest wages ranged from $1 to $2 a day with board, $1.25 and $1.50 being most frequently given; monthly rates varied from $15 to $35 with board, according to experience. More tried men are being hired by the year, with house, although improved machinery is rendering farmers more independent of help outside of the family."

November returns were summed up as follows: There was a sufficiency of farm labor in all parts of the Province, except when the rush of harvesting made a temporary shortage. In fact, the large number of applicants for farm labor this season led a majority of our correspondents to the conclusion that the rate of wages was more likely to fall than to rise. The quality of most of the labor offering was not up to the standard, but capable men were yet much in demand. Many farmers are now depending upon improved machinery and an interchange of work with their neighbors to meet the labor situation. The problem of getting adequate female help in the farm household is as yet unsolved, domestic servants being scarcer than ever.

The following table gives the average rate of wages paid farm laborers by the year and by the month, with and without board, for ten years; also the monthly wages paid domestic servants on the farm :—

Farm Laborers.	1908	*1906	1905	1904	1903	1902	1901	1900	1899	1898
Per year in yearly engagements:	$	$	$	$	$	$	$	$	$	$
With board	190	196	192	190	183	165	165	155	149	148
Without board	295	298	296	291	274	268	263	248	243	246
Per month for working season:	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
With board	21 57	22 19	21 61	21 49	19 44	18 52	17 78	16 57	15 38	15 31
Without board	31 07	31 90	31 32	31 02	28 04	27 51	27 05	25 73	24 93	25 44
Domestic servants per month	9 24	8 92	8 86	8 07	7 84	7 15	6 91	6 65	6 19	6 09

*No data for 1907.

TEMPERATURES OF 1908.

TABLE I.—Showing for each month the highest, lowest, mean highest, mean lowest, and mean temperature at the principal stations in Ontario for 1908; also the annual mean for each station.

Months.	Southampton.	Birnam.	London.	Woodstock.	Stoney Creek.	Toronto.	Lindsay.	Gravenhurst.	Ottawa.	Rockliffe.
	°	°	°	°	°	°	°	°	°	°
January.... Highest	41.0	40.1	42.0	40.1	44.0	41.5	38.8	39.0	37.0	36.0
Lowest	— 6.0	—15.0	— 9.0	— 7.5	—12.0	—13.8	—27.0	—48.0	—22.0	—42.0
Mean highest	30.9	28.5	30.6	29.5	33.2	31.9	26.1	26.4	21.0	18.1
Mean lowest	17.0	16.5	13.4	14.8	17.8	16 9	6.6	— 0.3	2.6	— 6.9
Monthly mean	23.9	22.5	22.0	22.1	25.5	24.4	16.4	13.1	11.8	5.6
February.. Highest	41 4	41.9	45.0	41.5	45.0	44.3	39.9	43.0	37.0	49.0
Lowest	—16.1	—14.0	—20.0	—20.0	—15.0	—17.5	—29.0	—33.0	—23.0	—39.0
Mean highest	25.6	24.7	26.9	25.5	28.0	27.3	21.6	21.6	18.8	19.5
Mean lowest	7.7	12.2	9.5	8.6	10.1	11.2	2.5	— 1.4	3.0	— 6.6
Monthly mean	16.7	18.4	18.2	17.0	19.1	19.3	12.0	10.1	10.9	6.4
March ..... Highest	52.8	64.3	65.0	60.0	70.0	63.8	49.4	50.0	46.0	48.0
Lowest	0.1	7.0	3.5	1.5	15.0	7.5	— 3.8	—10.7	— 2.0	—19.0
Mean highest	36.7	39.3	40.1	38.3	42.2	39.0	34.8	33.8	32.0	33.3
Mean lowest	19.7	24 9	22.9	21.1	26.6	23.9	16.8	13.4	16.6	8.3
Monthly mean	28.2	32.1	31.5	29 7	33.9	31.5	25.8	23.6	24.3	20.8
April ..... Highest	72.2	78.0	80.5	77.0	73.0	75.3	68.4	67.0	64.0	62.6
Lowest	12.3	22.0	18.0	17.0	21.0	17.5	10.3	— 2.0	8.0	— 4.0
Mean highest	49.0	51.8	53.4	50.9	51.1	50.1	48.8	45.8	44.6	44.2
Mean lowest	31.4	35.3	33.7	31.2	33.7	33.5	30.3	26.8	28.8	23.6
Monthly mean	40.2	43.6	43.6	41.0	42.4	41.8	39.5	36.3	36.6	33.9
May ..... Highest	82.0	85.0	87.5	85.0	88.0	84.0	84.7	86.0	85.0	81.0
Lowest	26 1	29.2	27.6	26.5	28.0	29.4	27.8	25.0	33.0	26.0
Mean highest	64.0	66.4	71.2	65.6	68.6	65.6	65.7	64.1	67.0	65.4
Mean lowest	45.8	47.6	48.9	45.6	45.7	46.9	46.8	43.9	48.8	42.4
Monthly mean	54.9	57.0	60.1	55.6	54.7	56.2	56.3	54.0	57.9	53 9
June..... Highest	87.2	87.4	92.0	87.5	94.0	88.2	89.7	91.0	92.0	91.0
Lowest	38.1	35.2	31.5	38.0	41.0	42.7	39.8	35.0	41.5	34.0
Mean highest	74.3	75.5	80.3	77.3	79.3	77.3	78.5	75.3	78.0	78.9
Mean lowest	38.1	55.0	53.3	51.6	52.5	55.2	52.7	50.5	41.5	47.2
Monthly mean	63.2	65.2	66.8	64.4	65.9	66.2	65.6	62.9	66.2	63.1
July ..... Highest	87.7	92.1	93.5	89.3	96.0	92.2	94.1	91.0	94.0	92.0
Lowest	48.2	47.0	47.5	47.4	52.0	51.7	48.9	45.0	61.0	44.0
Mean highest	76.4	80.0	83.7	80.3	83.6	81.6	82.4	78.3	82.7	76.8
Mean lowest	58.4	60.5	58.6	57.1	60.4	59.8	57.7	56.3	61.1	54.2
Monthly mean	67.4	70.3	71.2	68.7	72.0	70.7	70.1	67.3	71.9	65.6
August.... Highest	86.9	92.2	94.5	88.4	97.0	92.0	89.6	87.0	86.0	82.0
Lowest	42.1	43.5	41.0	41.0	43.0	43.0	40.7	37.0	45.0	39.0
Mean highest	73.7	76.3	79.5	76.1	80.4	77.8	78.0	74.6	77.9	71.0
Mean lowest	56.7	56.8	54.5	52.3	56.2	56.1	53.4	50.9	55.5	49.2
Monthly mean	65.2	66.6	67.0	64.2	68.3	67.0	65.7	62.8	66.7	60.1
September. Highest	87.5	89.7	92.5	89.0	97.0	89.6	88.6	85.0	89.5	83.0
Lowest	40.1	33.7	32.5	32.0	36.0	36.7	33.9	36.0	37.0	31.0
Mean highest	74.4	76.6	79.6	75.9	79.3	75.4	77.0	73 6	75.2	71.0
Mean lowest	53.0	54.4	49.6	49.1	51.7	52 0	49.2	47.1	51.0	45.0
Monthly mean	63.7	65.5	64.6	62.6	65.5	63.7	63.1	60.4	63.1	58.0
October.... Highest	76.2	79.0	81.5	79.0	85.0	77.8	76.8	74.0	78.0	74.0
Lowest	31.6	29.0	25.0	24.0	26 0	27.6	24.2	21.0	28.0	21.0
Mean highest	59.9	60.3	62.8	60.5	62.7	61.2	61.3	58.6	58.6	53.4
Mean lowest	41.2	41.6	38.5	37.7	40.3	41.6	38.4	35.7	39.1	35.2
Monthly mean	50.6	50.9	50.6	49.1	51.5	51.4	49.9	47.2	48.9	44.3
November. Highest	62.2	61.3	60.5	60.5	64.0	64.0	61.9	61.0	56.0	54.0
Lowest	25.0	15.0	17.0	12.0	21.0	22 4	13.4	16.8	14.0	14.0
Mean highest	46.2	45.3	45.3	45.2	48.1	47.1	42.9	43.3	38 9	36.2
Mean lowest	34.0	30.7	29.5	27.9	31.6	32.2	29.7	29.6	28.6	24.6
Monthly mean	40.1	38.0	37.4	36.6	39.8	39.6	36.3	36.4	33.8	30.4
December.. Highest	48.2	40.1	42.0	50.0	52.0	57.0	51.8	49.0	52.0	43.0
Lowest	10.1	4.0	2.5	— 5.0	10.0	6.2	—17.5	—13.9	—18.0	—20.0
Mean highest	31 0	32.2	33.7	32.7	35.9	35.2	30.4	29.8	23.8	21.1
Mean lowest	21.7	21.0	20.2	17.9	24.0	23.0	14.3	9.1	6.0	0 9
Monthly mean	27.9	26.6	27.0	25.3	30.0	29.1	22.3	19.5	14.9	11.0
Annual mean	45.2	46.4	46.7	44.7	47.4	46.7	43.6	41.1	42.2	37.7

AVERAGE TEMPERATURE FOR TWENTY-SEVEN YEARS.

TABLE II. Showing for each month the monthly average for the highest, lowest, mean highest, mean lowest and mean temperature at the principal stations in Ontario, derived from the twenty-seven years, 1882-1908, also the annual mean at each station for the same period.

Months.		Southampton	Birnam.	London.	Woodstock.	Stoney Creek	Toronto.	Lindsay.	Gravenhurst.	Ottawa.	Rockcliffe.
		°	°	°	°	°	°	°	°	°	°
January	Highest	44.9	46.4	46.5	46.1	51.3	45.0	41.8	41.7	40.3	37.9
	Lowest	— 7.1	— 9.4	— 9.4	—11.4	— 4.8	— 7.6	—20.1	—27.5	—21 4	—34.7
	Mean highest	28.3	27.0	28.7	27.8	32.4	28.9	24.3	24.1	19.8	18.1
	Mean lowest	13.4	14.8	13.7	11.4	18.0	14.3	6.6	3.7	1.7	— 6.2
	Monthly mean	20.8	20.9	21.2	19.6	25.2	21.6	15.5	13.9	10.8	6.0
February	Highest	44.5	46.8	46.1	45.3	48.2	44.1	42.0	42.0	40.1	41.6
	Lowest	—11.5	—12.9	—12.3	—11.9	— 6.9	— 8.4	—18.7	—26 8	—21 6	—35.5
	Mean highest	27.4	26.6	28.1	27.5	30.7	28.4	25.1	24.7	21.7	21.6
	Mean lowest	10.6	12.6	11.3	10.1	14.6	12.9	5.3	2.9	3.1	— 1.3
	Monthly mean	19.0	19.6	19.7	18 8	22.7	20.7	15.2	13.8	12.4	10 1
March	Highest	53.7	58.3	58.3	56.2	59.9	53.9	50.9	50.5	47.4	50 4
	Lowest	— 3.4	— 2.8	— 1.7	— 2.1	5.4	3.7	— 7.0	—13.5	— 8.6	—24 4
	Mean highest	35.1	36.2	37.6	36.2	40.1	36 2	34 0	33.8	32.4	33.0
	Mean lowest	19 3	21.3	20.5	18.8	24.9	21.8	15.8	13.0	14.9	6.9
	Monthly mean	27.2	28.7	29.0	27.5	82.5	29.0	24.9	23.4	23.7	19.9
April	Highest	72.9	76.8	76.1	74.7	77.2	71.0	74.0	71.0	73.3	73.9
	Lowest	15.3	17.8	18.4	17.2	23.1	21.0	13.7	11.0	14.9	6.1
	Mean highest	49.4	52.2	53.0	52.3	53.3	50.7	51.9	49.8	50.8	51 0
	Mean lowest	31.2	33.9	32.6	31.7	35.7	33.8	30.7	28.8	31.2	26.2
	Monthly mean	40.3	43.1	42.8	42.0	44.5	42.3	41.3	39.3	41.0	38.6
May	Highest	79.0	82.5	82.4	81.1	81.7	78.8	82.5	81 6	83.2	84.4
	Lowest	28.4	29.1	29.7	29.0	33.4	31.8	28.1	27.2	30.9	23 9
	Mean highest	61.2	65.4	66.6	64.7	65.5	62.8	65.8	63 8	66.2	65.4
	Mean lowest	41.4	44.4	44.2	42.5	45.0	43.9	42.1	41.8	43.5	38 4
	Monthly mean	51.3	54.9	55.4	53.6	55.3	53.4	53.9	52.6	54.9	51.9
June	Highest	85.4	88.1	87 9	87.1	91.8	86.8	88.8	87.1	88.3	89.5
	Lowest	37.5	37 5	38.2	38.6	42.6	42.6	39.2	36.8	42 2	33.7
	Mean highest	70.9	75.4	76.2	75.4	77.4	71 0	76.0	74.9	76.1	75.8
	Mean lowest	50.8	53.6	53.4	51.8	55.5	53.9	51.5	51.0	54.1	48.1
	Monthly mean	60.9	64.5	64.8	63.6	66.5	64.0	63.8	63.0	65.1	62.0
July	Highest	87.3	91.9	91.4	90.0	95.3	90.5	91.1	89.1	91.0	90.7
	Lowest	43.3	42.8	43.8	44.1	48.9	48.3	43 8	43.0	47.3	40 1
	Mean highest	77.1	79.7	80.0	79.4	82.8	78.7	79.8	78.2	79.1	78 2
	Mean lowest	56.0	57.4	57.3	55.6	61.0	58.5	55.5	55.5	58.4	52.9
	Monthly mean	66.5	68.5	68.6	67.5	71.9	68.6	67.6	66.8	68.7	65.5
August	Highest	86.1	89.8	89.5	88.5	93.2	87.8	89.4	87.7	88.5	87.9
	Lowest	41.9	42.1	40.6	41.6	46.5	46.6	40.6	39.8	43.7	37.3
	Mean highest	73.8	77.0	77.7	77.2	80.7	76.3	77.4	75.9	76.2	74.9
	Mean lowest	55.1	55.7	54.3	52.0	58.6	53.3	53.2	53.1	55.3	50.1
	Monthly mean	64.5	66.4	66.0	64 6	69.7	64.8	65.3	61.5	65.8	62.5
September	Highest	84.6	87.1	86.2	85.8	90.6	84.5	86.1	83.8	84.6	84.4
	Lowest	34.1	33.7	31.9	31.4	36.7	36.6	31.6	31.6	33.3	29.1
	Mean highest	68.6	70.9	71.5	70.5	74.3	69.4	69 4	68.8	68.6	67.8
	Mean lowest	49.9	51.0	49.6	47.4	53.0	50.9	47.0	47.1	48.2	43.7
	Monthly mean	59.2	60.9	60.5	58.9	63.6	60.1	58.2	57.9	58.4	55.7
October	Highest	74.2	75.8	75 3	74.3	77.5	72 5	73.8	72.3	70.7	72 5
	Lowest	24 8	24.9	23.6	22.7	26.0	26.2	21.1	21.4	23.4	17.6
	Mean highest	56.2	57.0	57.8	56.4	60 9	56 0	55.4	55.3	53.8	53.1
	Mean lowest	39.5	40.5	38.1	36.7	41.3	39.9	36 1	36.7	36.7	33 0
	Monthly mean	47.9	48.8	47 9	46.6	51.1	48.0	46.0	46.0	45.3	43.1
November	Highest	60.6	62.3	61.7	61.2	65.3	59.7	58.9	58 4	56.8	55.6
	Lowest	14.2	12.7	12.3	11.1	17.0	14.5	5 4	7.4	6.4	— 0.4
	Mean highest	43.3	42.7	44.0	42.8	47.0	43.5	40.5	40.5	38.3	36.8
	Mean lowest	30 1	30.6	29.2	27.7	32.3	30.6	25.9	26.0	25.5	21.7
	monthly mean	36.7	36.7	36.1	35.3	39.7	37.1	33.2	33.3	31.9	29.3
December	Highest	49.4	48.5	53.9	49.1	54.1	48.2	44 7	44.6	42.4	44.4
	Lowest	— 0 2	— 1.3	— 2.3	— 3.3	1.9	— 1.6	—13 6	—14.4	—15.8	—26.2
	Mean highest	33.3	31.8	33 1	32.1	36.0	33 5	28 8	29.1	24.7	23.6
	Mean lowest	20 3	20.8	19 8	18.0	22.8	20.7	13.3	12.5	9.0	3.7
	Monthly mean	26.8	26.3	26.9	25.0	29.4	27 1	21.0	20.8	16.8	13.6
Annual mean		43.4	44.9	44.9	43.6	47.7	44.7	42.2	41.3	41.2	38.2

RAIN AND SNOW.

TABLE III.—Summary of the total fall of rain and snow, and the number of days on which rain and snow fell in Ontario, during the year 1908, at stations reporting the whole year, and the average for the Province.

Station.	Rain.		Snow.	
	Inches.	Days.	Inches.	Days.
ALGOMA :				
Bruce Mines	18.87	69	104.7	39
BRANT :				
Brantford	19.64	52	56.5	21
Paris	25.02	73	65.3	29
BRUCE :				
Lucknow	21.74	93	148.3	78
North Bruce	16.05	78	77.9	60
Point Clark	13.86	29	76.0	33
Southampton	15.47	84	123.2	84
Wiarton	16.80	62	110.3	45
CARLETON :				
Ottawa	20.45	89	125.3	59
DUFFERIN :				
Orangeville	27.77	57	131.5	60
DURHAM :				
Port Hope	19.65	48	22.3	8
ESSEX :				
Cottam	26.08	65	67 8	23
Windsor	25.84	66	33.5	13
ELGIN :				
Dutton	18.54	36	56.5	19
Port Burwell	22.55	68	50.1	24
Port Stanley	22.11	101	67.8	64
FRONTENAC :				
Arden	26.68	103	104.0	35
Kingston	27.40	108	59.7	52
Sydenham	26.55	38	60.5	20
GREY :				
Meaford	18.54	61	108.5	43
Owen Sound	21.30	71	190.3	65
HALTON :				
Georgetown	24.55	104	88.2	54
HASTINGS :				
Madoc	18.23	62	116.9	50
HURON :				
Clinton	29.25	87	110.7	57
Goderich	17.57	56	76.0	30
KENT :				
Chatham	18.29	44	26.0	6
LAMBTON :				
Birnam	24.79	68	100.3	42
Sarnia	8.17	17	37.5	15
LANARK :				
MacCue	19.83	50	74.2	24
Montague	17.75	40	70.0	21
LEEDS :				
Lansdowne	15.64	23	29.0	8
Westport	21.90	46	94.3	39
MANITOULIN :				
Cockburn Island	19.64	57	108.5	35
MIDDLESEX :				
London	25.30	83	106 5	49
Strathroy	29.18	84	97.5	28
Westminster	17.07	33	57.3	15
MUSKOKA :				
Beatrice	21 61	56	162.5	55
Gravenhurst	22.71	58	135.5	65
NIPISSING :				
Haileybury	17.25	87	108.1	78
Lake Talon	13.37	53	73.0	38
NORFOLK :				
Port Dover	23.08	98	65.0	49
NORTHUMBERLAND :				
Wooler	22.77	52	64.0	22
ONTARIO :				
Uxbridge	16.73	65	74.5	33
OXFORD :				
Princeton	23.22	42	97.3	27
Woodstock	26.46	83	47.5	33
PARRY SOUND :				
Emsdale	19.84	89	93.1	53
Parry Sound	18.75	80	163.5	58
Uplands	16.31	58	150.2	67
PEEL :				
Alton	24.04	70	107.1	53
PETERBOROUGH :				
Ennismore	18.55	48	93.0	21
Lakefield	14.96	60	136.0	55
Otonabee	16.90	52	80.6	38
Peterborough	18.55	49	88.9	38
RENFREW :				
Rockcliffe	14.43	59	98.3	67
Renfrew	18.39	76	117.9	62
THUNDER BAY :				
Port Arthur	19.58	64	49.7	35
VICTORIA :				
Lindsay	21.11	95	161.0	64
WENTWORTH :				
Stony Creek	18.26	53	50.0	19
WELLINGTON :				
Guelph	17.78	64	66.0	28
WELLAND :				
Welland	23.30	86	56.2	32
YORK :				
Aurora	21.29	59	80.4	45
Deer Park	21.29	56	55.7	23
Toronto	21.88	99	77.4	58
Toronto East	20.74	67	41.5	26
Average for the Province : 1908	18.76	65	85.3	40
1907	23.18	73	66.6	38
1906	27.06	76	52.4	32
1905	24.90	78	64.3	39
1904	25.60	77	75.0	43
1903	26.44	78	69.8	40
1902	28.29	97	54.8	32
1901	24.12	79	76 3	43
1900	25.28	81	64.6	34
1899	25.13	87	60.5	54
1882-1908	24.30	85	73.2	40

RAIN AND SNOW.

TABLE IV. Monthly summary of inches of rain and snow in precipitation in the several districts of Ontario in 1908; also the average derived from the twenty-seven years, 1882-1908.

Districts.		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for year.
West and Southwest:		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Rain.	1908	0.67	0.94	1.05	1.29	2.14	1.11	1.69	2.40	0.41	0.77	0.64	0.71	13.82
	1882-1908	1 13	1.21	1.37	1.80	3.13	3.01	2.91	2 53	2.56	2.70	2.22	1.59	26.16
Snow.	1908	20.0	27.8	3.1	1.0	0.2					0.4	3.5	13.4	69.4
	1882-1908	15.3	12.9	8.4	2.4	0.1					0.6	5.0	12.0	56.7
Northwest and North:														
Rain.	1908	0.23	0.21	0.95	1.80	3.36	1.93	3.20	2.33	1.70	0-85	1.82	0 19	18.57
	1882-1908	0.76	0 56	1.02	1.44	2.68	2.84	2.91	2.77	3.04	2.94	1.88	0.95	23.73
Snow.	1908	20.9	31.0	9.6	3.4	0.4					0.2	8.7	30.5	107.7
	1882-1908	25.7	20.5	12.9	3.5	0.4					1.4	12.3	22.0	98.7
Centre:														
Rain.	1908	0.60	1.30	1.76	1.81	4.55	2.37	3.80	2.69	0.98	1.00	1.19	0.52	22.57
	1882-1908	1.08	0.99	1.35	1.73	2.85	2.88	2.85	2.44	2.33	2.16	1.97	1.38	24.31
Snow.	1908	18.8	21.6	7.8	4.0	0.4					0.8	5.7	14.3	76.4
	1882-1908	17.6	14.6	9.4	3.0	0.2					0.6	5.2	11.9	62.5
East and Northeast:														
Rain.	1908	0.32	0.83	1.37	1.47	4.33	1.91	2.90	2.00	1.43	1.37	1.37	0.51	20.11
	1882-1908	0.85	0.66	1.18	1.48	2.64	2.90	2.96	2.54	2.54	2.30	1.81	1.17	23.03
Snow.	1908	22.9	24.5	9.0	3.0	0.6					0.0	7.2	20.1	87.3
	1882-1908	20.6	17.4	10.6	3.2	0.3					0.8	7.3	14.9	75.1
The Province:														
Rain.	1908	0.45	0.82	1.36	1.59	3.59	1.83	2.90	2.36	1.13	1.00	1.25	0.48	18.76
	1882-1908	0.95	0 84	1.23	1.61	2.82	2.91	2.91	2.57	2.62	2.60	1.97	1.27	21.30
Snow.	1908	20.6	27.7	7.4	2.9	0.4					0.4	6.3	19 6	85.3
	1882-1908	19.8	16.3	10.3	3.0	0.2					0.9	7.5	15.2	73.2

SUNSHINE.

TABLE V. Monthly summary of bright sunshine at the principal stations in Ontario for 1908, showing the number of hours the sun was above the horizon, the hours of registered sunlight, the total for the year, and the average derived from the twenty-seven years, 1882-1908.

Stations.		January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November.	December.	Year.
		hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs	nrs.	hrs.	hrs.
Sun above the horizon		285.7	291.4	369.9	406.4	461.1	465.7	470.9	434 5	376.3	340.2	286.9	274.3	4463.3
Woodstock	1908	89.4	107.2	97.5	157.4	193 5	345.5	289.0	241.2	178.9	157.6	89 1	56.3	2002 6
	1882-1908	63.0	90.3	121.8	174.1	207.3	246.5	273.0	237.9	175.3	147.1	72.3	54.0	1862.6
Toronto	1908	88.2	126.5	104.4	175.0	186.1	340.9	321.3	290.7	195.9	186.6	91.1	60.8	2167.5
	1882-1908	79.3	109.1	147.6	192 2	219.9	258.9	282.7	253.3	209.2	150.2	83.2	63.4	2049.0
Lindsay	1908	94.6	133 2	95.2	175.8	171.1	336.3	283.5	238.2	170.2	169.8	60.4	39.6	1967.9
	1882-1908	71.2	105.9	148.9	195.3	214.3	244.8	259.5	239.5	195.7	137.8	72 2	56.1	1944.2
Kingston	1908	88.4	108.7	79.1	183.5	183.5	345.3	292.4	282.8	176.8	166.0	68.5	76.7	2059.0
	1882-1908	77.3	110.3	149.6	188.2	201.1	250.0	268.3	246.4	191.2	139.6	78.2	68.0	1968.2
Ottawa	1908	101.0	128.7	99.5	194 6	206.6	296.5	284.0	263.1	163.4	131.4	51.6	74.7	1995.4
	1882-1908	83 0	105.7	140.4	185.2	222.9	223.6	244.3	237.6	164.7	125 8	84.7	56.8	1874.7
Average of five stations	1908	92.3	120.9	95.2	177.3	188.2	332.9	295.4	268.3	177.0	162 3	72.1	61.6	2038.5
	1907	65.5	116.6	127 1	155.9	219.9	230.8	265.7	252 2	129.6	153 9	63.0	46.8	1827.0
	1882-1908	75.8	104.3	141.6	187.0	213.1	244.7	265.6	242.9	187.2	140.1	78.1	59.7	1939.6

RURAL AREA ASSESSED.

TABLE VI.—Showing by County Municipalities the rural area of Ontario as returned by Municipal assessors for 1908; also the comparative totals for the Province for the ten years 1899-1908.

Counties and Districts.	Acres of assessed land.	Acres cleared.	Acres of woodland	Acres of slash land	Acres swamp, marsh or wasteland	Per cent. cleared.
Algoma	488,474	59,106	361,772	21,915	45,681	12.10
Brant	215,928	177,060	12,057	14,514	12,297	82.00
Bruce	926,964	555,594	140,260	97,163	133,947	59.94
Carleton	565,121	347,592	55,457	99,616	62,456	61.51
Dufferin	357,085	257,710	32,161	27,608	39,606	72.17
Dundas	237,354	164,325	28,014	34,023	10,992	69.23
Durham	371,971	300,886	32,982	6,233	31,870	80.89
Elgin	436,440	350,908	58,135	21,705	5,692	80.40
Essex	426,483	325,241	47,722	45,470	8,050	76.26
Frontenac	697,777	291,587	152,381	145,955	107,854	41.79
Glengarry	286,052	197,342	55,511	9,785	23,414	68.99
Grenville	272,641	182,698	36,011	21,118	32,814	67.01
Grey	1,069,107	693,136	135,566	64,538	175,867	64.83
Haldimand	281,424	237,554	34,882	7,530	1,458	84.41
Haliburton	582,706	40,304	308,719	37,656	196,027	6.92
Halton	223,828	170,277	20,250	28,169	5,132	76.07
Hastings	1,054,204	423,652	284,186	150,877	195,489	40.19
Huron	798,393	648,189	59,175	30,240	60,789	81.19
Kent	567,745	460,255	48,104	40,983	18,403	81.07
Lambton	659,415	461,685	73,785	102,802	21,143	70.01
Lanark	666,570	318,719	187,101	66,498	94,252	47.81
Leeds	473,155	265,049	105,946	36,132	66,028	56.02
Lennox&Addington	444,237	261,630	105,401	20,676	56,530	58.89
Lincoln	191,395	163,379	17,161	8,692	2,163	85.36
Manitoulin	263,346	44,972	67,928	97,776	52,670	17.07
Middlesex	757,615	651,736	82,105	12,595	11,179	86.02
Muskoka	568,828	64,353	356,237	61,059	87,179	11.31
Nipissing	616,004	60,235	457,504	16,109	82,156	9.78
Norfolk	398,088	271,394	69,070	29,399	28,225	68.17
Northumberland	436,797	339,711	42,849	21,126	33,111	77.77
Ontario	504,401	368,372	28,712	41,913	65,404	73.03
Oxford	471,267	395,184	36,845	16,886	22,352	83.86
Parry Sound	607,871	76,301	384,627	57,817	89,126	12.55
Peel	288,569	260,564	10,319	5,464	12,222	90.30
Perth	518,693	442,942	38,245	27,185	10,321	85.40
Peterborough	573,993	257,195	131,075	95,079	90,644	44.81
Prescott	293,986	201,732	33,729	39,717	18,808	68.62
Prince Edward	231,894	194,318	18,516	3,543	15,517	83.80
Rainy River	289,038	23,546	205,708	15,727	44,057	8.15
Renfrew	1,025,699	341,357	355,804	136,286	192,252	33.28
Russell	250,843	124,960	35,673	87,661	2,549	49.82
Simcoe	967,669	642,507	117,504	145,292	62,366	66.40
Stormont	249,997	138,334	50,068	41,665	19,930	55.33
Thunder Bay	317,296	9,948	212,040	24,600	70,708	3.14
Victoria	598,286	284,069	64,319	81,306	168,592	47.48
Waterloo	307,512	253,407	32,078	5,622	16,405	82.41
Welland	228,890	185,734	19,794	12,722	10,610	81.15
Wellington	628,575	493,226	34,682	26,617	74,050	78.47
Wentworth	270,520	212,969	16,783	12,954	27,814	78.73
York	537,260	439,117	36,701	17,233	44,209	81.73
The Province:						
1908	24,497,406	14,132,061	5,331,654	2,273,251	2,760,440	57.69
1907	24,392,119	14,116,474	5,422,650	2,080,591	2,772,104	57.87
1906	24,284,730	14,107,015	5,449,125	1,963,350	2,765,240	58.09
1905	24,184,540	13,931,437	5,594,673	1,811,992	2,846,438	57.60
1904	24,138,846	13,809,368	6,670,902		3,658,576	57.21
1903	23,930,512	13,643,069	6,719,720		3,567,723	57.01
1902	23,727,010	13,570,229	6,684,512		3,472,269	57.19
1901	23,636,178	13,436,482	6,715,872		3,483,821	56.85
1900	23,568,104	13,297,206	7,127,363		3,143,535	56.42
1899	23,451,092	13,111,292	7,149,404		3,190,396	55.91

FALL WHEAT AND SPRING WHEAT.

TABLE VII.—Showing by County Municipalities of Ontario, the area, produce and market value of the crops of Fall Wheat and Spring Wheat for the year 1908, together with the totals for the Province for the past ten years and the average for the twenty-seven years, 1882-1908; also the average yield per acre.

Counties and Districts.	Fall Wheat.				Spring Wheat.			
	Acres.	Bushels.	Per acre.	Market value.	Acres.	Bushels.	Per acre.	Market value.
Algoma	276	7,838	28.4	$7,783	462	9,055	19.6	$8,874
Brant	23,318	578,286	24.8	512,940	32	678	21.2	590
Bruce	35,638	751,962	21.1	664,734	1,275	21,675	17.0	18,294
Carleton	48	1,008	21.0	996	4,013	65,813	16.4	62,851
Dufferin	5,267	112,714	21.4	100,315	2,502	43,535	17.4	37,919
Dundas	352	7,814	22.2	7,587	264	5,069	19.2	4,912
Durham	5,731	140,410	24.5	128,756	10,154	138,094	13.6	120,280
Elgin	22,967	583,362	25.4	518,609	170	3,961	23.3	3,406
Essex	14,972	369,808	24.7	323,212	934	16,905	18.1	14,657
Frontenac	812	14,291	17.6	13,434	1,980	26,532	13.4	24,197
Glengarry	.....	.....	.....	.....	2,419	40,639	16 8	38,201
Grenville	322	5,442	16.9	5,279	458	8,061	17.6	7,569
Grey	25,184	629,609	25.0	559,714	4,750	81,225	17.1	70,747
Haldimand	27,077	601,109	22.2	525,970	489	7,922	16 2	6,797
Haliburton	.....	.....	.....	.....	411	7,686	18.7	6,971
Halton	18,456	430,025	23.3	390,033	601	9,496	15.8	8,195
Hastings	3,536	67,538	19.1	61,662	2,504	37,560	15.0	33,466
Huron	33,086	797,373	24.1	708,067	1,966	36,568	18.6	31,997
Kent	52,472	1,448,227	27 6	1,286,026	213	4,004	18.8	3,471
Lambton	27,489	744,952	27.1	651,088	576	9,792	17.0	8,421
Lanark	865	17,560	20.3	16,735	5,507	62,780	11.4	60,332
Leeds	1,727	35,231	20.4	34,209	930	12,648	13 6	12,269
Lennox & Add.	1,704	36,806	21.6	33,199	4,494	62,916	14.0	58,386
Lincoln	12,117	265,362	21.9	231,396	573	9,970	17.4	8,465
Manitoulin	759	17,457	23.0	16,218	964	16,581	17.2	15,304
Middlesex	45,226	1,139,695	25.2	1,007,490	401	7,499	18.7	6,172
Muskoka	141	2,820	20.0	2,764	420	6,888	16.4	6,592
Nipissing	141	2,961	21.0	2,952	855	15,732	18.4	15,575
Norfolk	28,989	617,466	21.3	537,813	13	163	12.5	140
Northumberland	8,300	189,240	22.8	171,073	3,975	43,725	11.0	38,522
Ontario	14,172	357,131	25.2	323,563	12,565	224,914	17.9	196,800
Oxford	26,515	652,269	24.6	577,910	44	823	18.7	727
Parry Sound	39	819	21.0	792	427	7,771	18.2	7,507
Peel	14,956	397,830	26.6	358,843	2,616	47,611	18.2	41,374
Perth	27,260	651,514	23.9	585,060	988	20,452	20.7	17,957
Peterborough	11,462	273,942	23.9	255,040	2,957	43,468	14.7	38,991
Prescott	182	3,221	17.7	3,037	4,013	59,794	14.9	56,386
Prince Edward	1,644	33,866	20.6	30,615	906	11,416	12.6	10,354
Rainy River	62	1,463	23.6	1,434	482	10,459	21.7	10,250
Renfrew	699	13,001	18.6	12,975	30,036	378,454	12.6	377,697
Russell	.....	.....	.....	.....	2,096	32,488	15.5	30,669
Simcoe	66,606	1,518,617	22.8	1,365,237	8,750	151,375	17.3	135,178
Stormont	.....	.....	.....	.....	520	8,060	15 5	7,673
Thunder Bay	.....	.....	.....	.....	45	1,125	25.0	1,080
Victoria	7,206	159,253	22.1	141,098	7,243	119,510	16 5	101,105
Waterloo	29,450	748,030	25.4	668,739	292	5,548	19.0	4,549
Welland	18,683	381,133	20.4	330,061	150	2,430	16 2	2,024
Wellington	10,519	279,805	26.6	251,545	6,223	116,992	18.8	98,741
Wentworth	21,067	461,367	21.9	417,076	127	2,413	19.0	2,143
York	32,148	880,855	27.4	805,982	7,339	139,441	19.0	121,453
The Province:								
1908	679,642	16,430,476	24.2	14,649,061	142,124	2,197,716	15.5	1,996,230
1907	676,164	15,545,491	23.0	14,410,670	144,514	2,473,651	17.1	2,137,234
1906	787,287	18,841,774	23.9	13,321,134	171,745	3,267,000	19.0	2,250,963
1905	796,213	17,933,961	22.5	13,719,480	190,116	3,582,627	18.8	2,683,387
1904	605,458	9,160,623	15.1	9,041,535	225,027	3,471,103	15.4	3,269,779
1903	665,028	17,242,763	25.9	12,949,315	248,518	4,650,707	18.7	3,460,126
1902	748,592	20,233,669	27.0	14,305,204	303,115	6,048,024	20.0	4,209,425
1901	911,587	15,943,229	17.5	10,538,474	358,048	5,498,751	15.4	3,673,166
1900	1,068,640	23,369,737	21.9	15,517,505	376,905	6,940,333	18.4	4,684,725
1899	1,049,691	14,439,827	13.3	9,631,365	398,726	7,041,317	17.7	4,682,476
1882-1908 (27 years)	862,770	17,876,453	20.7	14,126,153	393,488	6,243,677	15.9	5,041,060

BARLEY AND OATS.

TABLE VIII.—Showing by County Municipalities of Ontario the area, produce and market value of the crops of Barley and Oats for the year 1908, together with the totals for the Province for the past ten years and the average for the twenty-seven years, 1882-1908; also the average yield per acre.

Counties and Districts.	Barley.				Oats.			
	Acres.	Bushels.	Per acre.	Market Value.	Acres.	Bushels.	Per Acre.	Market Value.
Algoma	1,475	46,758	31.7	$ 26,372	10,608	375,523	35.4	$ 185,133
Brant	11,942	316,463	26.5	167,092	28,840	1,041,124	36.1	416,450
Bruce	19,668	674,612	34.3	338,655	108,230	4,047,802	37.4	1,509,830
Carleton	9,080	254,240	28.0	143,391	94,207	3,259,512	34.6	1,411,390
Dufferin	22,356	681,858	30.5	345,702	67,477	2,348,200	34.8	887,620
Dundas	3,982	121,451	30.5	70,806	33,125	1,268,688	38.3	550,611
Durham	22,637	511,596	22.6	274,215	55,630	1,830,227	32.9	735,751
Elgin	10,867	326,010	30.0	178,653	47,860	1,794,750	37.5	734,053
Essex	12,114	364,631	30.1	183,045	75,450	2,738,835	36.3	1,035,280
Frontenac	5,424	135,600	25.0	75,800	52,248	1,462,944	28 0	674,417
Glengarry	6,045	174,701	28.9	102,375	42,510	1,445,340	34.0	604,152
Grenville	2,122	62,175	29.3	34,569	32,292	1,055,948	32.7	481,512
Grey	31,743	1,053,868	33.2	524,826	146,551	5,187,905	35.4	1,929,901
Haldimand	8,289	180,700	21.8	93,061	38,192	1,126,664	29.5	445,032
Haliburton	644	16,873	26.2	9,162	5,882	179,989	30.6	85,135
Halton	10,722	272,339	25.4	145,429	28,651	1,065,817	37.2	441,248
Hastings	25,955	511,314	19.7	285,825	78,101	2,093,107	26.8	981,667
Huron	31,914	1,091,459	34.2	539,181	127,872	4,948,646	38.7	1,835,948
Kent	32,700	990,810	30.3	523,148	75,245	3,092,570	41.1	1,156,621
Lambton	25,563	718,320	28.1	351,258	94,043	3,526,613	37.5	1,290,740
Lanark	6,710	155,672	23.2	90,290	50,102	1,387,825	27.7	631,460
Leeds	3,902	94,819	24 3	54,900	46,676	1,288,258	27.6	599,040
Lennox & Add	9,191	178,305	19.4	98,959	45,345	1,192,574	26.3	519,962
Lincoln	2,646	73,823	27.9	39,569	24,786	892,296	36.0	371,195
Manitoulin	1,372	42,258	30.8	23,242	5,869	214,805	36.6	91,292
Middlesex	24,154	760,851	31.5	387,273	108,459	4,229,901	39.0	1,653,891
Muskoka	580	13,862	23.9	8,123	11,804	354,120	30.0	162,187
Nipissing	914	24,038	26.3	14,711	9,672	263,078	27.2	136,011
Norfolk	6,451	158,050	24.5	86,295	36,754	1,109,971	30.2	458,418
Northumberl'd	19,746	414,666	21.0	225,993	57,361	1,600,372	27.9	681,758
Ontario	32,387	893,881	27.6	467,500	75,280	2,898,280	38.5	1,170,905
Oxford	20,966	656,236	21.3	346,493	79,995	3,063,809	38.3	1,243,906
Parry Sound	1,048	25,676	24.5	15.765	13,439	405,858	30.2	200,494
Peel	32,449	833,939	25.7	451,995	51,512	1,942,002	37.7	780,685
Perth	27,819	990,356	35.6	485,274	102,263	3,885,994	38.0	1,449,476
Peterborough	11,560	289,000	25.0	156,349	58,484	1,824,701	31.2	759,076
Prescott	6,367	149,625	23.5	83,790	51,937	1,542,529	29.7	630,894
Prince Edward	12,945	240,777	18 6	133,150	26,511	628,311	23.7	294,050
Rainy River	892	27,652	31.0	17,117	4,057	124,144	30.6	62,320
Renfrew	5,593	112,979	20.2	62,929	67,542	1,600,745	23.7	728,339
Russell	4,357	121,996	28.0	70.026	31,996	1,084,664	33.9	460,982
Simcoe	65,381	2,000,659	30.6	1,036,341	134,184	5,166,084	38.5	1,994,108
Stormont	2,091	59,594	28.5	34,803	28,103	1,017,329	36.2	436,434
Thunder Bay	311	9,610	30.9	5,526	1,537	50,875	33.1	22,894
Victoria	21,923	561,229	25.6	282,298	71,565	2,433,210	34.0	919,753
Waterloo	18,842	567,144	30.1	305,123	56,228	2,209,760	39.3	908,211
Welland	2,592	61,171	23.6	34,378	27,865	813,658	29.2	349,873
Wellington	35,532	1,115,705	31.4	564,547	110,380	3,797,072	34.4	1,492,249
Wentworth	11,148	311,029	27.9	166,089	39,007	1,458,862	37.4	611,263
York	48,918	1,438,189	29.4	782,375	102,532	4,255,078	41.5	1,774,368
The Province:								
1908	734,029	20,888,569	28.5	10,943,788	2,774,259	96,626,419	34.8	38,987,985
1907	766,891	21,718,332	28.3	12,900,689	2,932,509	83,524,301	28.5	40,759,859
1906	756,163	25,253,011	33.4	11,363,855	2,716,711	108,341,455	39.9	36,836,095
1905	772,633	21,265,394	31.4	10,409,854	2,668,416	105,563,572	39.6	35,469,360
1904	772,434	24,567,825	31.8	10,736,140	2,654,936	102,173,443	38.5	33,002,022
1903	709,839	24,378,817	34.3	10,263,482	2,638,665	109,874,053	41.6	32,193,097
1902	661,622	21,890,602	33.1	9,872,661	2,500,758	106,431,439	42.6	37,038,141
1901	637,201	16,761,076	26 3	7,542,484	2,408,164	78,334,490	22.5	28,357,085
1900	577,810	16,909,751	29 3	6,577,893	2,398,834	89,693,327	37.4	23,768,732
1899	490,374	14,830,891	30.2	5,858,202	2,363,778	89,897,724	38.0	24,901,670
1882-1908 (27 years)	651,681	18,054,233	27.7	8,604,994	2,164,345	77,367,975	35.7	25,394,740

PEAS AND BEANS.

TABLE IX.—Showing by County Municipalities of Ontario, the area, produce and market value of the crops of Peas and Beans for the year 1908, together with the totals for the Province for the past ten years and the average for the twenty-seven years, 1882-1908; also the average yield per acre.

Countries and Districts.	Peas.				Beans.			
	Acres.	Bushels.	Per acre.	Market value.	Acres.	Bushels.	Per acre.	Market value.
Algoma	2,936	66,060	22.5	$61,370	11	198	18.0	$347
Brant	3,864	72,257	18.7	58,311	223	4,460	20.0	6,021
Bruce	33,159	742,762	22.4	606,094	130	2,145	16.5	3,282
Carleton	2,410	47,718	19.8	38,604	393	6,760	17.2	11,086
Dufferin	7,649	146,861	19.2	119,839	23	460	20.0	690
Dundas	455	9,600	21.1	7,709	152	3,070	20.2	4,728
Durham	21,692	344,903	15.9	294,202	361	6,787	18.8	11,470
Elgin	6,833	124,361	18.2	95,261	8,289	142,571	17.2	201,025
Essex	2,179	37,479	17.2	35,605	195	3,257	16.7	4,886
Frontenac	2,522	40,856	16.2	33,420	246	3,788	15.4	6,061
Glengarry	932	16,310	17.5	14,597	224	3,360	15.0	5,242
Grenville	192	3,955	20.6	3,401	218	2,115	9.7	3,511
Grey	31,003	651,063	21.0	524,106	196	3,332	17.0	5,231
Haldimand	10,641	129,820	12.2	102,817	347	4,546	13.1	7,183
Haliburton	655	11,725	17.9	9,720	16	259	16.2	414
Halton	7,384	105,591	14.3	87,007	14	280	20.0	476
Hastings	6,891	100,609	14.6	85,316	253	4,605	18.2	7,000
Huron	26,127	535,604	20.5	445,087	275	4,675	17.0	6,031
Kent	5,899	116,800	19.8	94,024	25,479	422,951	16.6	630,197
Lambton	5,148	101,416	19.7	79,814	1,359	21,608	15.9	28,523
Lanark	2,669	47,508	17.8	37,199	216	2,938	13.6	4,877
Leeds	1,019	19,463	19.1	16,252	130	2,106	16.2	3,412
Lennox and Add	4,452	68,116	15.3	56,741	229	4,328	18.9	6,276
Lincoln	3,421	54,052	15.8	43,133	230	4,002	17.4	6,483
Manitoulin	5,022	100,440	20.0	69,806	10	150	15.0	225
Middlesex	8,301	171,001	20.6	131,329	1,386	22,315	16.1	32,580
Muskoka	1,487	30,781	20.7	26,903	45	810	18.0	1,523
Nipissing	2,958	61,231	20.7	55,108	28	448	16.0	820
Norfolk	8,394	130,946	15.6	106,328	1,733	34,313	19.8	49,068
Northumberland	16,607	230,837	13.9	202,906	646	11,370	17.6	15,691
Ontario	15,388	273,906	17.8	230,629	260	5,642	21.7	8,463
Oxford	6,401	139,542	21.8	116,099	65	1,170	18.0	1,802
Parry Sound	3,019	61,890	20.5	55,206	11	176	16.0	264
Peel	7,961	128,968	16.2	108,720	58	1,160	20.0	1,601
Perth	12,387	273,753	22.1	215,170	31	558	18.0	854
Peterborough	15,124	296,430	19.6	269,751	50	900	18.0	1,359
Prescott	1,106	18,138	16.4	16,433	160	2,800	17.5	4,788
Prince Edward	8,285	104,391	12.6	88,210	432	8,424	19.5	12,552
Rainy River	42	680	16.2	612	2	30	15.0	45
Renfrew	15,932	242,166	15.2	208,505	567	10,660	18.8	17,802
Russell	983	16,908	17.2	15,910	89	1,727	19.4	2,642
Simcoe	24,074	519,998	21.6	427,438	285	5,330	18.7	8,368
Stormont	283	4,698	16.6	4,106	102	1,816	17.8	2,760
Thunder Bay	51	1,020	20.0	918	.....	.....	.....	.....
Victoria	11,405	220,117	19.3	180,936	182	2,730	15.0	4,177
Waterloo	7,730	164,649	21.3	134,848	25	438	17.5	727
Welland	2,582	36,148	14.0	27,472	819	11,220	13.7	20,084
Wellington	13,036	246,380	18.9	201,785	100	1,800	18.0	2,484
Wentworth	4,425	70,358	15.9	57,131	33	561	17.0	982
York	13,527	261,071	19.3	219,561	149	2,608	17.5	3,990
The Province:								
1908	396,642	7,401,336	18.7	6,121,449	46,477	783,757	16.9	1,160,103
1907	340,977	7,365,036	21.6	5,744,728	47,562	790,269	16.6	1,201,209
1906	410,356	7,388,987	18.0	5,216,625	51,272	950,312	18.5	1,320,934
1905	374,518	7,100,021	19.0	4,636,314	50,543	846,443	16.7	1,117,305
1904	339,260	6,629,866	19.5	4,176,816	50,892	912,849	17.9	1,113,676
1903	407,133	8,924,650	21.9	5,738,550	53,039	978,246	18.4	1,379,327
1902	532,639	7,664,679	14.4	5,441,922	53,964	670,633	12.4	905,355
1901	602,724	10,089,173	16.7	6,588,230	53,688	824,122	15.4	1,030,153
1900	661,592	14,058,198	21.2	8,027,231	44,053	820,373	18.6	817,912
1899	743,139	15,140,790	20.4	8,675,673	40,485	651,009	16.1	703,090
1882-1908 (27 years)	636,642	12,369,822	19.4	7,368,378	41,937	717,867	17.1	808,615

RYE AND BUCKWHEAT.

TABLE X.—Showing by County Municipalities of Ontario, the area, produce and market value of the crops of Rye and Buckwheat for the year 1908, together with the totals for the Province for the past ten years, and the average for the twenty-seven years 1882-1908, also the average yield per acre.

Counties and Districts.	Rye.				Buckwheat.			
	Acres.	Bushels.	Per acre.	Market value.	Acres.	Bushels.	Per acre.	Market value.
Algoma	81	2,025	25.0	$ 1,377	83	1,951	23.5	$ 1,229
Brant	4,655	78,670	16.9	56,328	2,061	47,403	23.0	25,550
Bruce	1,116	20,088	18.0	13,138	2,087	51,758	24.8	27,794
Carleton	960	16,416	17.1	11,902	3,933	103,831	26.4	58,353
Dufferin	3,186	65,313	20.5	43,956	4,243	109,894	25.9	56,156
Dundas	169	3,583	21.2	2,419	1,349	35,209	26.1	20,280
Durham	6,444	94,082	14 6	65,011	8,549	194,917	22.8	105,645
Elgin	3,358	65,817	19.6	44,032	3,653	77,809	21.3	42,562
Essex	1,383	29,596	21.4	21,960	1,428	22,562	15.8	11,574
Frontenac	1,837	31,596	17.2	24,392	1,741	44,047	25.3	26,560
Glengarry					1,699	45,873	27.0	24,450
Grenville	889	16,535	18.6	11,078	3,562	78,008	21.9	42,826
Grey	208	4,368	21.0	3,014	3,133	83,651	26.7	44,084
Haldimand	795	13,595	17.1	8,606	1,432	27,781	19.4	14,224
Haliburton	156	2,855	18.3	1,930	577	13,675	23.7	7,713
Halton	131	2,293	17.5	1,605	244	4,075	16.7	2,253
Hastings	5,111	79,221	15.5	52,444	5,841	136,095	23.3	79,343
Huron	359	6,318	17.6	3,633	2,811	69,994	24.9	36,117
Kent	1,374	29,541	21.5	20,442	1,013	24,109	23.8	11,572
Lambton	454	8,535	18.8	5,462	317	6,340	20.0	3,614
Lanark	829	13,596	16 4	9,789	4,146	101,992	24.6	53,036
Leeds	520	21,678	19.6	15,066	3,148	58,553	18.6	33,434
Lennox and Add.	3,174	48,562	15.3	34,673	6,039	142,520	23.6	77,388
Lincoln	718	11,991	16.7	8,298	305	5,673	18.6	3,177
Manitoulin	196	3,293	16.8	2,009	146	3,650	25.0	1,916
Middlesex	730	12,921	17.7	7,494	778	13,615	17.5	7,202
Muskoka	31	510	15.0	344	64	1,280	20.0	814
Nipissing	89	1,602	18.0	1,202	104	2,496	24.0	1,790
Norfolk	13,325	207,870	15.6	152,369	10,558	246,001	23.3	135,793
Northumberland	8,660	117,776	13.6	82,208	9,673	243,760	25.2	127,730
Ontario	3,886	63,342	16.3	43,326	8,611	210,108	24.4	111,988
Oxford	1,243	20,634	16.6	14,650	1,199	27,577	23.0	15,995
Parry Sound	79	1,477	18.7	1,075	43	753	17.5	447
Peel	1,323	22,359	16 9	15,741	1,891	42,169	22.3	22,434
Perth	37	740	20.0	533	817	20,425	25.0	11,847
Peterborough	1.628	25,560	15.7	17,049	5.041	95,779	19.0	50,571
Prescott					1,163	28,261	24.3	17,437
Prince Edward	5,318	75,516	14.2	54,976	4,121	87,777	21.3	48,453
Rainy River					1	22	22.0	13
Renfrew	2,523	39,359	15.6	27,669	2,129	40,238	18.9	21,849
Russell	137	2,055	15.0	1,439	411	9,782	23.8	6,143
Simcoe	4,960	90,272	18.2	59,580	7.204	175,778	24 4	91,580
Stormont	186	3,757	20.2	2,773	1,706	47,256	27.7	26,936
Thunder Bay								
Victoria	1,604	25,985	16.2	17,384	8,915	213,069	23.9	112,714
Waterloo	1,230	23,739	19.3	17,804	416	9,776	23.5	5,836
Welland	467	7,519	16.1	5,000	1,877	46,925	25.0	26,606
Wellington	594	10,870	18.3	7,109	4,459	132,432	29.7	71,248
Wentworth	734	11,964	16.3	8,671	2.254	43,728	19.4	24,356
York	1,018	18,222	17.9	11,990	3,630	93,291	25.7	49,258
The Province:								
1908	87,908	1,453,616	16.5	1,012,953	140,605	3,323,668	23.6	1,799,890
1907	67,158	1,039,021	15.5	721,081	112,039	2,546,468	22.5	1,461,673
1906	79,870	1,327,582	16.6	808,497	106,444	1,792,903	16 8	887,487
1905	101,292	1,714,951	16.9	974,092	101,591	2,199,652	21.7	1,099,826
1904	130,702	2,001,826	15.3	1,153,052	100,608	2,066,234	20.5	1,004,190
1903	179,277	2,970 768	16 6	1,443,793	95,487	2,049,169	21.5	907,782
1902	189,318	3,509,332	18.5	1,772,213	93,321	1,911,683	20.5	917,608
1901	158,236	2,545,268	16.1	1,254,817	88,266	1,757,071	19.9	850,422
1900	142,213	2,367,635	16.6	1,143,453	102,570	1,874,261	18.3	819,052
1899	137,824	2,284,816	16.6	1,142,423	132,082	2,203,299	16.7	1,002,501
1882-1908 (27 years)	117,176	1,916,187	16.4	1,013,522	101,980	2,019,728	19.8	867,965

CORN.*

TABLE XI.—Showing by County Municipalities of Ontario, the area, produce and market value of the crops of Corn for husking and for fodder for the year 1908, together with the totals for the Province for the past ten years and the average for the seventeen years, 1892-1908, also the averages per acre.

Counties and Districts.	Corn for husking.				Corn for silo.			
	Acres.	Bushels.	Per acre	Market value.	Acres.	Tons (green.)	Per acre.	Market value.
Algoma	36	1,800	50.0	$810	99	990	10.00	$1,980
Brant	4,456	352,024	79.0	150,666	5,120	67,123	13.11	134,246
Bruce	663	39,780	60.0	17,782	5,413	65,281	12.06	130,562
Carleton	673	31,429	46.7	15,683	11,073	143,919	13.00	287,898
Dufferin	38	1,900	50.0	760	436	4,360	10.00	8,720
Dundas	3,159	224,921	71.2	114,935	7,998	115,411	14 43	230,822
Durham	1,377	94,462	68.6	47,231	3,526	34,625	9.82	69,250
Elgin	22,602	1,946,032	86.1	830,956	8,486	73,149	8.62	146,298
Essex	77,449	6,389,543	82.5	2,229,951	3,138	10,450	3.33	20,900
Frontenac	2,940	282,828	96.2	136,606	6,878	81,642	11.87	163,284
Glengarry	901	37,842	42.0	16,537	4,955	75,167	15.17	150,334
Grenville	3,286	226,077	68.8	113,038	5,220	65,250	12.50	130,500
Grey	261	20,880	80.0	8,394	5,947	70,294	11.82	140,588
Haldimand	2,427	177,414	73.1	77,175	2,103	22,018	10.47	44,036
Haliburton	104	5,283	50.8	2,642	62	794	12.80	1,588
Halton	439	28,535	65.0	12,841	3,857	45,590	11.82	91,180
Hastings	5,860	284,796	48.6	136,417	9,098	105,901	11.64	211,802
Huron	1,316	96,068	73 0	39,868	9,038	113,517	12.56	227,034
Kent	65,965	5,580,639	84.6	2,059,256	4,629	33,375	7.21	66,750
Lambton	20,069	1,527,251	76.1	639,918	7,744	65,050	8.40	130,100
Lanark	1,482	87,438	59.0	43,282	7,058	94,860	13.44	189,720
Leeds	5,283	359,772	68.1	176,648	8,532	105,456	12.36	210,912
Lennox & Addington	2,790	221,805	79.5	104,470	3,743	37,430	10 00	74,860
Lincoln	5,650	409,060	72.4	202,485	1,659	17,287	10.42	34,574
Manitoulin	135	6,750	50.0	2,700	571	7,806	13.67	15,612
Middlesex	16,974	1,352,828	79.7	583,069	14,387	163,005	11.33	326,010
Muskoka	266	10,640	40.0	4,256	311	2,333	7.50	4,666
Nipissing	37	1,776	48.0	888	48	384	8.00	768
Norfolk	15,102	1,164,364	77.1	483,211	4,606	39,934	8.67	79,868
Northumberland	2,827	179,515	63.5	80,782	5,764	66,286	11.50	132,572
Ontario	1,693	99,887	59.0	38,756	5,239	64,492	12.31	128,984
Oxford	8,842	673,760	76.2	290,391	14,714	192,165	13.06	384,330
Parry Sound	96	4,320	45.0	1,814	150	1,415	9.43	2,830
Peel	239	14,340	60.0	6,697	3,032	40,629	13.40	81,258
Perth	453	30,215	66.7	14,503	7,564	98,332	13.00	196,664
Peterborough	515	25,750	50.0	11,588	2,620	30,287	11.56	60,574
Prescott	2,611	148,305	56.8	70,000	2,405	27,152	11.29	54,304
Prince Edward	6,173	385,813	62.5	182,104	5,626	40,001	7.11	80,002
Rainy River	2	80	40.0	40	24	48	2.00	96
Renfrew	919	73,520	80.0	32,569	3,244	40,777	12.57	81,554
Russell	885	82,570	93.3	42,358	3,066	38,141	12.44	76,282
Simcoe	1,254	70,224	56.0	34,761	4,228	52,131	12.33	104,262
Stormont	1,337	115,116	86.1	54,450	4,952	71,507	14.44	143,014
Thunder Bay								
Victoria	244	14,640	60.0	6,588	2,090	23,283	11.14	46,566
Waterloo	713	48,698	68.3	21,817	5,020	64,256	12 80	128,512
Welland	7,016	521,404	74.0	232,025	1,976	16,717	8.46	33,434
Wellington	182	10,920	60 0	3,636	3,145	38,117	12.12	76,234
Wentworth	1,393	103,918	74 6	47,802	5,987	70,587	11.79	141,174
York	526	34,190	65.0	15,180	7,172	90,511	12.62	181,022
The Province:								
1908	299,690	23,661,122	78.8	9,440,336	233,753	2,729,265	11.68	5,458,530
1907	338,573	21,899,166	64.7	6,219,448	200,354	2,029,547	10.13	4,059,094
1906	289,456	23,988,682	82.9	9,019,744	180,796	2,149,413	11.89	4,298,826
1905	295,005	20,922,919	70.9	7,720,557	184,784	2,284,812	12.36	4,569,624
1904	329,882	20,241,914	61.4	7,570,476	193,115	2,023,340	10.48	4,046,680
1903	378,921	29,287,888	77.3	10,807,230	209,727	2,564,400	12.23	5,128,800
1902	371,959	20,512,194	55.1	8,327,951	209,859	2,611,334	12 44	5,222,668
1901	323,923	24,838,105	76.7	9,438,480	197,932	2,359,514	11.92	4,719,028
1900	330,772	27,093,561	81.9	8,588,659	179,798	2,147,532	11.94	4,295,064
1899	333,590	21,673,234	65.0	4,291,300	171,935	1,697,755	9.87	3,395,510
1892-1908 (17 yrs)	308,485	21,919,691	71.1	6,603,106	175,794	2,009,849	11.43	4,019,698

*The combined average area for corn for the twenty-seven years 1882-1908 is 377,464 acres, the average value of the produce for the same period being $8,060,511.

POTATOES AND CARROTS.

TABLE XII.—Showing by County Municipalites of Ontario, the area, produce and market value of the crops of Potatoes and Carrots for the year 1908, together with the totals for the Province for the past ten years, and the average for the twenty-seven years, 1882-1908; also the average per acre.

Counties and Districts.	Potatoes.				Carrots.			
	Acres.	Bushels.	Per acre.	Market value.	Acres.	Bushels.	Per acre.	Market value.
Algoma	1,545	205,485	133	$105,825	75	18,075	241	$2,259
Brant	2,887	404,180	140	181,073	36	10,764	299	1,345
Bruce	4,301	529,023	123	222,719	157	51,653	329	6,457
Carleton	6,595	362,725	55	233,958	173	17,300	100	2,162
Dufferin	3,145	509,490	162	188,002	61	16 714	274	2,089
Dundas	2,101	107,151	51	65,469	46	12,650	275	1,581
Durham	3,160	344,440	109	133,987	80	26,000	325	3,250
Elgin	3,250	354,250	109	194,483	50	15,700	314	1,962
Essex	3,403	350,509	103	204,697	75	26,250	350	3,281
Frontenac	4,369	410,686	94	251,340	114	27,930	245	3,491
Glengarry	2,490	151,890	61	79,438	53	11,554	218	1,444
Grenville	2,798	209,850	75	115,208	60	15,000	250	1,875
Grey	6,251	943,901	151	341,692	162	49,896	308	6,237
Haldimand	1,794	161,460	90	88,964	25	4,825	193	603
Haliburton	600	89,400	149	51,316	5	840	168	105
Halton	1,849	227,427	123	103,934	35	8,155	233	1,019
Hastings	6,184	538,008	87	297,518	155	25,885	167	3,236
Huron	4,622	674,812	146	264,526	74	27,750	375	3,469
Kent	4,319	505,323	117	282,981	76	29,108	383	3,639
Lambton	3,829	352,268	92	192,338	169	51,714	306	6,464
Lanark	2,701	221,482	82	137,762	58	13,920	240	1,740
Leeds	3,052	259,420	85	157,468	102	16,626	163	2,078
Lennox & Add	3,429	294,894	86	166,615	43	9,675	225	1,209
Lincoln	2,136	185,832	87	104,995	107	33,919	317	4,240
Manitoulin	714	117,810	165	45,592	35	5,250	150	656
Middlesex	7,525	1,030,925	137	460,823	174	51,156	294	6,395
Muskoka	1,369	176,601	129	100,133	57	13,794	242	1,724
Nipissing	1,696	166,208	98	108,035	96	38,400	400	4,800
Norfolk	3,298	323,204	98	154,815	79	23,700	300	2,963
Northumberland	4,488	489,192	109	193,231	129	31,863	247	3,983
Ontario	4,037	440,033	109	186,134	33	6,600	200	825
Oxford	3,140	427,040	136	214,374	82	30,340	370	3,793
Parry Sound	1,877	225,240	120	120,503	62	15,004	242	1,876
Peel	3,788	515,168	136	214,310	90	34,920	388	4,365
Perth	3,201	467,346	146	185,169	75	21,150	282	2,644
Peterborough	2,979	315,774	106	174,623	93	20,739	223	2,592
Prescott	3,053	271 717	89	167,649	110	26,510	241	3,314
Prince Edward	2,103	180,858	86	99,110	33	6,369	193	796
Rainy River	477	66,780	140	38,131	30	10,500	350	1,313
Renfrew	4,162	378,742	91	239,365	105	21,000	200	2,625
Russell	1,716	102,960	60	64,556	122	34,160	280	4,270
Simcoe	9,079	1,243,823	137	453,995	204	66,912	328	8,364
Stormont	2,079	139,293	67	87,476	59	20,650	350	2,581
Thunder Bay	839	125,850	150	89,731	31	7,750	250	969
Victoria	2,626	288,860	110	132,876	27	8,100	300	1,013
Waterloo	3,048	399,288	131	175,287	93	31,992	344	3,999
Welland	3,267	215,622	66	133,470	43	8,127	189	1,016
Wellington	4,267	682.720	160	245,779	68	22,984	338	2,873
Wentworth	4,605	612,465	133	292,146	26	8,086	311	1,011
York	6,731	720,217	107	330,580	133	32,186	242	4,023
The Province:								
1908	166,974	18,517,612	111	8,874,201	4,080	1,120,145	275	140,018
1907	177,186	20,057,675	113	11,693,625	*	*	*	*
1906	136,064	15,020,299	110	8,080,921	4,980	1,598,698	321	199,837
1905	132,530	14,366,049	108	6,608,383	5,509	1,846,659	335	230,832
1904	133,819	15,479,122	116	7,847,915	6,634	2,022,945	305	252,868
1903	139,011	16,676,447	120	7,354,313	7,805	2,612,778	335	326,597
1902	144,733	12,942,502	89	7,312,614	8,625	3,227,161	374	403,395
1901	154,155	18,116,637	118	7,717,687	9,221	3,199,967	347	399,996
1900	163,754	21.476,439	131	5,605,351	10,320	3.469,123	336	433,640
1899	168,148	19,933,366	119	6,538,144	11,891	3,674,035	309	459,254
1882-1908	156,641	17,944,924	109	7,557,030	9,750	3,377,971	346	422,246

*Included with other roots for 1907, and the figures for the period are for 26 years.

MANGEL-WURZELS AND TURNIPS.

TABLE XIII. Showing by County Municipalities of Ontario, the area, produce and market value of the crops of Mangel-Wurzels and Turnips for the year 1908, together with the totals for the Province for the past ten years and the average for the twenty-seven years, 1882-1908; also the average per acre.

Counties and Districts.	Mangel-Wurzels.				Turnips.			
	Acres.	Bushels.	Per acre.	Market value.	Acres.	Bushels.	Per acre.	Market value.
Algoma	24	6,408	267	$513	734	259,102	353	$ 25,910
Brant	1,503	835,668	556	66,853	2,952	885,600	300	88,560
Bruce	4,382	1,695,834	387	135,667	5,880	1,417,080	241	141,708
Carleton	990	308,880	312	24,710	2,338	801,934	343	80,193
Dufferin	778	305,754	393	24,460	3,664	1,099,200	300	109,920
Dundas	180	54,000	300	4,320	88	17,600	200	1,760
Durham	2,174	889,166	409	71,133	5,545	1,968,475	355	196,847
Elgin	666	321,678	483	25,734	302	90,600	300	9,060
Essex	729	408,240	560	32,659	70	28,840	412	2,884
Frontenac	423	117,594	278	9,408	381	121,158	318	12,116
Glengarry	221	71,825	325	5,746	496	167,648	338	16,765
Grenville	152	30,704	202	2,456	229	75,112	328	7,511
Grey	3,670	1,504,700	410	120,376	7,904	2,632,032	333	263,203
Haldimand	299	101,660	340	8,133	72	15,408	214	1,541
Haliburton	29	7,018	242	561	179	56,564	316	5,656
Halton	1,575	773,325	491	61,866	1,450	435,000	300	43,500
Hastings	625	145,625	233	11,650	1,486	445,800	300	44,580
Huron	6,160	2,987,600	485	239,008	5,426	1,633,226	301	163,323
Kent	980	473,340	483	37,867	367	121,110	330	12,111
Lambton	1,337	572,236	428	45,779	454	126,666	279	12,667
Lanark	596	164,496	276	13,160	1,166	377,784	324	37,778
Leeds	337	102,448	304	8,196	444	111,888	252	11,189
Lennox & Add	215	79,765	371	6,381	327	112,488	344	11,249
Lincoln	376	170,328	453	13,626	156	41,964	269	4,196
Manitoulin	51	15,300	300	1,224	310	108,500	350	10,850
Middlesex	2,730	1,209,390	443	96,751	2,229	664,242	298	66,424
Muskoka	51	13,413	263	1,073	515	180,250	350	18,025
Nipissing	78	15,600	200	1,248	470	131,130	279	13,113
Norfolk	718	280,738	391	22,459	1,190	389,130	327	38,913
Northumberland	1,307	542,405	415	43,392	4,463	1,883,386	422	188,339
Ontario	3,412	1,480,808	434	118,465	12,169	4,758,079	391	475,808
Oxford	3,034	1,550,374	511	124,030	6,215	2,038,520	328	203,852
Parry Sound	47	21,150	450	1,692	1,018	321,736	307	32,174
Peel	1,251	560,448	448	44,836	1,322	482,852	366	48,285
Perth	5,199	2,474,724	476	197,978	4,668	1,316,376	282	131,638
Peterborough	1,371	387,993	283	31,039	2,246	808,560	360	80,856
Prescott	182	45,500	250	3,640	262	85,936	328	8,594
Prince Edward	292	77,964	267	6,237	140	31,500	225	3,150
Rainy River	43	8,385	195	671	128	54,400	425	5,440
Renfrew	385	130,130	338	10,410	771	282,957	367	28,296
Russell	264	74,712	283	5,977	411	147,138	358	14,714
Simcoe	2,658	1,249,260	470	99,941	8,728	3,229,360	370	322,936
Stormont	68	20,400	300	1,632	45	11,835	263	1,183
Thunder Bay	14	4,200	300	336	144	36,000	250	3,600
Victoria	1,468	593,072	404	47,446	5,407	1,984,369	367	198,437
Waterloo	2,813	1,440,256	512	115,221	4,360	1,635,000	375	163,500
Welland	131	44,409	339	3,553	113	19,662	174	1,966
Wellington	4,756	2,206,784	464	176,543	11,808	4,534,272	384	453,427
Wentworth	2,247	1,094,289	487	87,543	2,168	758,800	350	75,880
York	4,946	2,200,970	445	176,078	7,480	2,273,920	304	227,392
The Province:								
1908	67,937	29,870,966	440	2,389,677	120,920	41,210,189	341	4,121,019
1907	*	*	*	*	123,011	48,205,605	392	4,820,561
1906	69,352	32,863,192	474	2,629,055	132,512	57,060,151	431	5,706,015
1905	69,035	33,216,930	481	2,657,354	135,348	57,654,086	426	5,765,409
1904	71,344	33,595,440	471	2,687,635	133,207	64,861,703	487	6,486,170
1903	80,918	41,768,239	516	3,341,459	134,469	69,316,341	515	6,931,634
1902	76,553	39,140,924	511	3,131,274	136,725	71,740,204	525	7,174,020
1901	61,095	29,683,324	486	2,374,666	145,909	68,287,467	468	5,828,747
1900	54,543	24,728,525	453	1,978,282	156,583	59,330,395	379	5,933,040
1899	53,401	20,898,387	391	1,671,871	153,440	58,078,390	379	5,807,839
1882-1908	39,632	18,249,381	460	1,459,950	127,275	54,596,496	429	5,459,650

*Included with other roots for 1907, and the figures for the period are for 26 years.

SUGAR BEETS—HAY AND CLOVER.

TABLE XIV. Showing by County Municipalities of Ontario, the area, produce and market value of the crops of Sugar Beets and Hay and Clover for the year 1908, together with the totals for the Province for the past ten years and the average for the twenty-seven years 1882-1908; also the average per acre.

Counties and Districts.	Sugar Beets				Hay and Clover			
	Acres	Bushels	Per Acre	Market Value	Acres	Tons	Per Acre	Market Value
Algoma	32	12,800	400	$ 1,536	26,865	38,148	1.42	$ 432,598
Brant	217	91,574	422	10,989	33,978	55,044	1.62	510,808
Bruce	66	20,922	317	2,511	124,352	162,901	1.31	1,360,223
Carleton	387	80,883	209	9,706	86,590	109,103	1.26	1,506,712
Dufferin	478	157,262	329	18,872	54,071	78,403	1.45	631,928
Dundas	92	32,200	350	3,864	48,693	55,023	1.13	699,342
Durham	161	44,275	275	5,313	53,324	90,656	1.70	935,570
Elgin	514	181,442	353	21,773	71,415	117,835	1.65	1,119,433
Essex	1,052	460,776	438	55,293	54,853	95,993	1.75	760,265
Frontenac	141	45,825	325	5,499	95,067	111,228	1.17	1,399,248
Glengarry	103	33,475	325	4,017	61,165	92,359	1.51	905,118
Grenville	65	26,000	400	3,120	49,774	65,702	1.32	919,828
Grey	721	281,911	391	33,829	159,211	240,409	1.51	2,057,901
Haldimand	74	20,128	272	2,415	67,482	103,247	1.53	854,885
Haliburton	10	2,800	280	336	14,394	16,121	1.12	202,641
Halton	38	16,720	440	2,006	37,075	58,579	1.58	624,452
Hastings	125	28,125	225	3,375	107,021	149,829	1.40	1,916,312
Huron	151	48,320	320	5,798	126,150	185,441	1.47	1,528,034
Kent	4,806	2,095,416	436	251,450	75,795	127,336	1.68	1,061,982
Lambton	1,538	733,626	477	88,035	100,302	155,468	1.55	1,207,986
Lanark	227	53,572	236	6,429	71,223	85,468	1.20	1,177,749
Leeds	128	37,120	290	4,455	73,846	98,215	1.33	1,348,492
Lennox & Add	69	18,354	266	2,203	85,839	98,715	1.15	1,075,994
Lincoln	246	112,176	456	13,461	46,889	66,582	1.42	727,075
Manitoulin	27	7,776	288	931	18,847	23,182	1.23	197,974
Middlesex	666	227,772	342	27,333	118,165	190,246	1.61	1,814,947
Muskoka	26	5,200	200	624	28,613	38,628	1.35	432,634
Nipissing	54	18,900	350	2,268	25,810	27,875	1.08	361,539
Norfolk	226	74,806	331	8,977	52,721	91,207	1.72	872,851
Northumberland	215	88,365	411	10,604	66,820	94,884	1.42	982,049
Ontario	138	44,850	325	5,382	68,026	105,440	1.55	1,041,747
Oxford	664	292,160	440	35,059	76,562	114,843	1.50	1,212,742
Parry Sound	28	11,200	400	1,344	31,530	33,422	1.06	424,794
Peel	393	179,601	457	21,552	53,806	80,171	1.49	775,254
Perth	180	77,400	430	9,288	94,815	157,393	1.66	1,353,580
Peterborough	96	30,432	317	3,652	53,064	77,473	1.46	947,495
Prescott	46	10,166	221	1,220	67,728	88,724	1.31	834,893
Prince Edward	51	12,138	238	1,457	46,669	50,403	1.08	646,166
Rainy River	22	4,400	200	528	12,114	17,323	1.43	190,553
Renfrew	62	12,400	200	1,488	92,102	81,050	.88	1,069,860
Russell	21	5,775	275	693	41,275	58,611	1.42	621,277
Simcoe	985	401,880	408	48,226	110,149	149,803	1.36	1,659,817
Stormont	11	3,575	325	429	41,731	60,093	1.44	694,675
Thunder Bay					5,198	6,498	1.25	94,221
Victoria	42	8,400	200	1,008	57,033	78,135	1.37	896,208
Waterloo	103	34,299	333	4,116	49,756	74,136	1.49	842,926
Welland	48	15,792	329	1,895	57,823	79,218	1.37	781,089
Wellington	815	346,375	425	41,565	116,125	192,768	1.66	1,705,997
Wentworth	421	185,240	440	22,229	49,235	66,960	1.36	789,458
York	672	270,144	402	32,417	92,050	138,996	1.51	1,487,257
The Province :								
1908	17,453	7,004,748	401	840,570	3,253,141	4,635,287	1.42	47,696,579
1907	*	*	*	*	3,289,552	3,891,863	1.18	58,806,050
1906					3,069,917	4,684,625	1.53	42,630,087
1905					3,020,365	5,847,494	1.94	45,142,654
1904					2,926,207	5,259,189	1.80	41,915,736
1903					2,783,565	4,336,562	1.56	34,432,302
1902					2,646,202	4,955,438	1.87	40,386,820
1901					2,557,263	4,632,317	1.81	37,012,213
1900					2,526,566	3,133,045	1.24	26,568,222
1899					2,505,422	3,498,705	1.40	27,010,003
1882-1908					2,559,323	3,746,155	1.46	34,175,289

* In 1907 "other roots" (sugar beets, carrots and mangels) showed 90,025 acres yielding 40,082,859 bushels, valued at $3,607,457.

ALL FIELD CROPS—ORCHARD AND VINEYARD.

TABLE XV.—Showing by County Municipalities for 1908 the aggregate area, the market value and the value per acre of all field crops enumerated in Tables VII and XIV, also the totals for the past ten years; the area in orchard, small fruits and vineyard.

Counties and Districts.	All Field Crops.			Orchard & Small fruit.	Vineyard.
	Acres.	Value.	Per acre.	Acres.	Acres.
Algoma	45,342	$863,916	$19 05	763	10
Brant	126,084	2,387,822	18 94	5,428	68
Bruce	346,517	5,199,450	15 00	9,756	63
Carleton	223,863	3,899,595	17 42	3,448	30
Dufferin	175,374	2,576,948	14 69	3,053	30
Dundas	102,205	1,791,145	17 53	2,662	73
Durham	200,545	3,197,911	15 95	8,621	118
Elgin	211,282	4,167,300	19 72	10,207	58
Essex	249,424	4,940,149	19 81	10,121	1,258
Frontenac	177,123	2,859,273	16 14	4,172	58
Glengarry	124,213	1,968,416	15 84	2,093	31
Grenville	101,639	1,883,281	18 53	2,156	35
Grey	426,895	6,633,843	15 54	14,497	93
Haldimand	161,538	2,281,442	14 12	6,232	75
Haliburton	23,724	385,890	15 13	388	10
Halton	112,521	2,017,044	17 90	9,035	319
Hastings	258,746	4,211,613	16 28	10,326	78
Huron	377,347	6,077,121	16 10	13,372	96
Kent	351,332	7,501,537	21 35	14,056	221
Lambton	290,391	4,742,207	16 33	12,415	151
Lanark	155,555	2,511,338	16 14	2,318	11
Leeds	149,776	2,688,020	17 95	2,992	60
Lennox and Addington	171,083	2,328,565	13 61	5,656	11
Lincoln	102,015	1,816,368	17 80	13,079	4,096
Manitoulin	35,028	495,551	14 15	520	3
Middlesex	352,285	6,615,183	18 78	16,178	160
Muskoka	45,783	772,385	16 87	582	13
Nipissing	43,050	720,828	16 74	208	8
Norfolk	181,157	3,190,281	17 32	10,201	233
Northumberland	210,981	3,180,833	15 08	18,624	119
Ontario	257,296	4,549,275	17 68	8,691	70
Oxford	249,681	4,786,153	19 17	10,274	51
Parry Sound	52,943	868,577	16 41	265	11
Peel	176,687	2,977,950	16 85	6,445	107
Perth	287,757	4,857,635	16 88	7,079	48
Peterborough	169,290	2,860,605	16 90	3,425	34
Prescott	141,325	1,956,379	13 84	2,280	27
Prince Edward	121,249	1,691,382	13 95	12,535	22
Rainy River	18,378	328,563	17 88	41	.....
Renfrew	226,771	2,923,932	12 89	1,808	18
Russell	87,829	1,417,938	16 14	1,010	40
Simcoe	448,729	7,850,132	17 49	11,801	110
Stormont	83,273	1,500,925	18 02	2,112	30
Thunder Bay	8,170	219,275	26 84	33	.....
Victoria	198,980	3,089,607	15 53	3,087	22
Waterloo	180,119	3,501,215	19 44	5,105	31
Welland	125,182	1,983,946	15 81	8,172	1,641
Wellington	322,009	5,395,762	16 76	7,049	84
Wentworth	144,877	2,744,957	18 95	11,835	1,743
York	328,971	6,222,926	18 92	10,344	27
The Province:					
1908	9,165,634	155,632,389	16 98	326,550	11,705
1907	9,307,515	168,543,378	18 11	*326,290	.....
1906	8,962,925	144,570,075	16 13	352,306	12,785
1905	8,897,898	142,804,431	16 05	366,613	13,719
1904	8,673,525	134,304,690	15 48	369,495	14,357
1903	8,731,405	136,657,807	15 65	365,851	15,269
1902	8,677,988	146,421,171	16 87	356,251	14,028
1901	8,667,512	128,325,648	14 81	346,915	12,227
1900	8,794,953	114,758,761	13 05	339,411	10,687
1899	8,753,926	105,771,321	12 08	338,073	10,802
1882-1908	8,242,256	120,455,135	14 61	.....	.....

* Including Vineyard.

NOTE.—Orchard, Vineyard, Pasture and Mixed Grains are not included in All Field Crops.

PASTURE—MIXED GRAINS.

TABLE XVI.—Showing by County Municipalities for 1908 the area of Pasture (cleared land), also the totals for the past ten years; the area, produce and market value of mixed grains for the year 1908, and the totals of the Province for 1907 and 1908.

Counties and Districts.	Pasture acres.	Mixed Grains.			
		Acres.	Bushels.	Per acre.	Value.
Algoma	8,859	1,073	34,336	32.0	$18,885
Brant	29,200	5,963	220,035	36.9	121,019
Bruce	149,373	15,157	565,356	37.3	310,946
Carleton	90,417	14,143	537,434	38.0	295,589
Dufferin	50,141	8,815	285,606	32.4	157,083
Dundas	45,973	8,800	303,600	34.5	166,980
Durham	55,155	14,911	460,750	30.9	253,412
Elgin	80,981	11,630	416,354	35.8	228,995
Essex	45,538	7,341	244,455	33.3	134,450
Frontenac	87,816	6,381	134,001	21.0	73,701
Glengarry	54,909	3,948	117,256	29.7	64,491
Grenville	57,721	4,433	171,114	38.6	94,113
Grey	172,973	19,275	690,045	35.8	379,525
Haldimand	37,664	6,125	169,050	27.6	92,977
Haliburton	11,406	524	16,820	32.1	9,251
Halton	29,191	7,973	262,312	32.9	144,272
Hastings	126,375	5,911	128,860	21.8	70,873
Huron	199,361	24,756	906,070	36.6	498,338
Kent	76,592	9,630	354,384	36.8	194,911
Lambton	124,340	14,030	517,707	36.9	284,739
Lanark	121,252	8,472	264,326	31.2	145,379
Leeds	91,701	6,059	131,480	21.7	72,314
Lennox and Addington	76,971	6,399	160,615	25.1	88,338
Lincoln	23,921	2,702	86,734	32.1	47,704
Manitoulin	7,397	1,149	37,343	32.5	20,539
Middlesex	233,015	14,589	535,416	36.7	294,479
Muskoka	14,183	741	24,083	32.5	13,246
Nipissing	7,948	1,042	28,134	27.0	15,474
Norfolk	41,379	5,328	185,947	34.9	102,271
Northumberland	76,809	11,710	306,802	26.2	168,741
Ontario	59,728	19,621	669,076	34.1	367,992
Oxford	95,753	15,733	567,961	36.1	312,378
Parry Sound	15,352	1,171	32,203	27.5	17,712
Peel	54,198	5,356	166,036	31.0	91,320
Perth	112,780	15,818	615,320	38.9	338,426
Peterborough	65,186	4,215	116,334	27.6	63,984
Prescott	49,655	2,015	47,151	23.4	25,933
Prince Edward	43,622	4,001	112,028	28.0	61,615
Rainy River	3,418	281	11,240	40.0	6,182
Renfrew	95,498	7,411	194,909	26.3	107,200
Russell	27,600	4,000	144,000	36.0	79,200
Simcoe	112,341	20,590	695,942	33.8	382,768
Stormont	47,526	5,424	168,686	31.1	92,777
Thunder Bay	774	142	4,544	32.0	2,500
Victoria	57,651	10,417	342,719	32.9	188,495
Waterloo	32,584	22,044	784,766	35.6	431,621
Welland	36,455	3,698	103,174	27.9	56,746
Wellington	91,821	41,437	1,450,295	35.0	797,662
Wentworth	31,330	6,833	232,322	34.0	127,777
York	54,336	16,832	599,219	35.6	329,570
The Province:					
1908	3,326,169	456,049	15,354,350	33.7	8,444,893
1907	*	443,100	14,202,511	32.1	7,811,381
1906	3,349,101	.....	.....	.....	.....
1905	3,291,235	.....	.....	.....	.....
1904	3,183,973	.....	.....	.....	.....
1903	3,057 576	.....	.....	.....	.....
1902	2,879,972	.....	.....	.....	.....
1901	2,777,983	.....	.....	.....	.....
1900	2,694,600	.....	.....	.....	.....
1899	2,710,268	.....	.....	.....	.....

*Statistics for pasture not taken in 1907.

RATIOS OF AREAS UNDER CROP.

TABLE XVII.—Showing by County Municipalities of Ontario the number of acres under the various crops in 1908 per 1,000 acres of cleared land; together with the average for the Province for the past ten years, and the average of the twenty-seven years 1882-1908.

Counties and Districts.	Fall Wheat.	Spring Wheat.	Barley.	Oats.	Peas.	Beans.	Rye.	Buckwheat.	Corn.	Potatoes.	*Other Field Roots.	Hay and Clover.	Mixed Grains.
Algoma	4.7	7.8	24.9	179.5	49.7	.2	1.4	1.4	2.3	26.1	14.6	454.5	20.9
Brant	131.7	.2	67.4	162.9	21.8	1.3	26.3	11.6	54.1	16.3	26.6	191.9	33.7
Bruce	64.1	2.3	35.4	194.8	59.7	.2	2.0	3.8	10.9	7.8	18.9	223.8	27.3
Carleton	.1	11.6	26.1	271.0	6.9	1.1	2.8	11.3	33.8	19.0	11.2	249.1	40.7
Dufferin	20.4	9.7	86.7	261.8	29.7	.9	12.4	16.5	1.1	12.2	19.3	209.8	34.2
Dundas	2.2	1.6	24.2	201.6	2.8	.9	1.0	8.2	67.9	12.8	2 5	296.3	53.6
Durham	19.0	33.8	75.2	184.9	72.1	1.2	21.4	28.4	16.3	10.5	26.5	177.2	49.6
Elgin	65.4	.5	30.9	136.4	19.5	23.6	9.6	10.4	88.6	9.3	4.4	203.5	33.1
Essex	46.0	2.9	37.2	232.0	6.7	.6	4.2	4 4	247.8	10.5	5.9	168.7	22.6
Frontenac	2.8	6.8	18.6	179.2	8.6	.8	6.3	6.0	33.7	15.0	3.6	326.0	21.9
Glengarry	.....	12.3	30.6	215.4	4.7	1.1	....	8.6	29.7	12.6	4.4	310.0	20.0
Grenville	1.8	2.5	11.6	176.7	1.0	1.2	4.9	19.5	46.6	15.3	2.8	272.4	24.3
Grey	36.3	6.9	45.8	211.4	44.7	.3	.3	4.5	9.0	9.0	18.0	229.7	27.8
Haldimand	114.0	2.0	34.9	160.8	44.8	1.5	3.3	6.0	19.1	7.5	2.0	284.1	25.8
Haliburton	.....	10.2	16.0	145.9	16.3	.4	3.9	14.3	4.1	14.9	5.5	357.1	13.0
Halton	108.4	3.5	63.0	168.3	43.4	.1	.8	1.4	25.2	10.8	18.2	217.7	46.8
Hastings	8.3	5.9	61.3	184.4	16.3	.6	12.1	13.8	35.3	14.6	5.6	252.6	14.0
Huron	51.1	3.0	49.2	197.3	40.3	.4	.6	4.3	16.0	7.1	18.2	194.6	38.2
Kent	114.0	.4	71.0	163.5	12.8	55.4	3.0	2.2	153.4	9.4	13.5	164.7	20.9
Lambton	59.5	1.2	55.4	203.7	11.2	2.9	1.0	.7	60.2	8.3	7.6	217.3	30.4
Lanark	2.7	17 3	21.0	157.2	8.4	.7	2.6	13.0	26.8	8.5	6.4	223 5	26.6
Leeds	6.5	3.5	14.7	176.1	3.9	.5	2.0	11.9	52.1	11.5	3.8	278 6	22.9
Lennox & Addington	6.5	17.2	35.1	173.3	17.0	.9	12.1	23.1	25.0	13.1	2.5	328.1	24.4
Lincoln	74.2	3.5	16.2	151.7	20.9	1.4	4.4	1.9	44.7	13.1	5.4	287 0	16.5
Manitoulin	16.9	21.4	30.5	130.5	111.7	.2	4.4	3.2	15.7	15.9	9.4	419.1	25.5
Middlesex	69.4	.6	37.1	166.4	12.7	2.1	1.1	1.2	48.1	11.6	8.9	181.3	22.4
Muskoka	2.2	6.5	9.0	183.4	23.1	.7	.5	1.0	9.0	21.3	10.1	444.6	11.5
Nipissing	2.3	14.2	15.2	160.6	49.1	.4	1.5	1 7	1.4	28.2	11.6	428.5	17.3
Norfolk	106.8	.....	23.8	135.4	30.9	6.4	49.1	38.9	72.6	12.2	8.2	194.3	19.6
Northumberland	24.4	11.7	58.1	168.9	48.9	1.9	25.5	28.5	25.3	13.2	18.0	196.7	34.5
Ontario	38.5	34.1	87.9	204.3	41.8	.7	10.5	23.4	18.8	11.0	42.8	184.7	53.3
Oxford	67.1	.1	53.1	202.4	16.2	.2	3.2	3.0	59.6	7.9	25.3	193.7	39.8
Parry Sound	.5	5.6	13.7	176.1	39.6	.2	1.0	.6	3.2	24.6	15.5	413.2	15.3
Peel	57.4	10.0	124.5	197.7	30.6	.2	5.1	7.3	12.6	14.5	11.7	206.5	20.6
Perth	61.5	2.2	62.8	230.9	28.0	.1	.1	1.8	18.1	7.2	22.9	214.1	35.7
Peterborough	44.6	11.5	44.9	227.4	58.8	.2	6.3	19.6	12.2	11.6	14.8	206.3	16.4
Prescott	.9	19.9	31.6	257.4	5.5	.8	....	5.8	24.9	15.1	3.0	335.7	10.0
Prince Edward	8.5	4.7	66.6	136.4	42.6	2.2	27.4	21.2	60.7	10.8	2.7	240.2	20.6
Rainy River	2.6	20.4	37.9	172.3	1.8	.1	.....	.....	1.1	20.3	9.5	514.5	11.9
Renfrew	2.0	88.0	16.4	197.8	46.7	1.7	7.4	6 2	12.2	12.2	3.9	269.8	21.7
Russell	.....	16.8	34.9	256.0	7.9	.7	1.1	3.3	31.6	13.7	6.5	330.3	32.0
Simcoe	103.7	13.6	101.8	208.8	37.5	.4	7.7	11.2	8.5	14.1	19.6	171.5	32.0
Stormont	.....	3.8	15.1	203.2	2.0	.7	1.3	12.3	45.5	15.0	1.3	301.7	39.2
Thunder Bay	.....	4.5	31.3	154.5	5.1	.....	.....	.....	.....	84.3	19.0	522.5	14.3
Victoria	25.4	25.5	77.2	251.9	40.1	.6	5.7	31.4	8.2	9.2	24.4	200.8	36.7
Waterloo	116.2	1.2	74.4	221.9	30.5	.1	4.9	1.6	22.6	12.0	29.1	196.3	87.0
Welland	100.6	.8	14.0	150.0	13.9	4.4	2.5	10.1	48.6	17.6	1.8	311.3	19.9
Wellington	21.3	12.6	72.1	223.8	26.4	.2	1.2	9.0	6.8	8.7	35.4	235.4	84.0
Wentworth	98.9	.6	52.3	183.2	20.8	.2	3.4	10.6	34.7	21.6	22.8	231.2	32.1
York	73.2	16.7	111.4	233.5	30.8	.4	2.3	8.3	17.6	15.3	30.1	209.6	38.3
The Province :													
1908	48.1	10.1	51.9	196.3	28.1	3.3	6.2	9.9	37.7	11.8	14.9	230.2	32.3
1907	47.9	10.2	54.3	207.7	24.1	3.4	4.8	8.0	38.2	12.6	15.1	233.0	31.4
1906	55.8	12.2	53.6	192.6	29.1	3.6	5.7	7.5	33.3	9.7	14.7	217.6	.....
1905	57.2	13.6	55.5	191.5	26.9	3.6	7.3	7.3	31.4	9 5	15.1	216.8	.....
1904	43.8	16.3	55.9	192.2	24.6	3.7	9.5	7.3	37.9	9.7	15.3	211.9	.....
1903	48.8	18.2	52.0	193.4	29.9	3.9	13.1	7.0	43.2	10.2	16.4	204.0	.....
1902	55.2	22.3	48.8	184.3	39.2	4.0	13.9	6.9	42.9	10.7	16.3	195.0	.....
1901	67.8	26.6	47.4	179.3	44.9	4.0	11.8	6.6	38.8	11.5	16.1	190.3	.....
1900	80.4	28.3	43.4	180.4	49.8	3.3	10.7	7.7	38.4	12.3	16.7	190 0	.....
1899	80.1	30.4	37.4	180.3	56.7	3.1	10.5	10.1	38.6	12.8	16.6	191.1	.....
1882-1908	69.5	31.7	52.5	174.4	51.3	3.4	9.4	8.2	30.4	12.6	14.2	206.2	.....

* This includes Carrots, Mangel-Wurzels, Turnips and Sugar Beets.

MARKET PRICES.

TABLE XVIII.—The following table shows by counties the average prices of agricultural products for 1908; together with the average price for the past ten years, and the average for twenty-seven years, 1882-1908.

Counties and District.	Fall Wheat, per bush.	Spring Wheat, per bush.	Barley, per bush.	Oats, per bush.	Peas, per bush.	Beans, per bush.	Rye, per bush.	Buckwheat, per bush.	Corn (in ear) per bush.	Hay, per ton.	Potatoes, per bush.
	cts.	cts.	cts.	cts.	cts.	$ c.	cts.	cts.	cts.	$ c.	cts.
Algoma	99.3	98.0	56.4	49.3	92.9	1 75	68.0	63.0	45.0	11 34	51.5
Brant	88.7	87.0	52.8	40.0	80.7	1 35	71.6	53.9	42.8	9 28	44.8
Bruce	88.4	84.4	50.2	37.3	81.6	1 53	65.4	53.7	44.7	8 35	42.1
Carleton	98.8	95.5	56.4	43.3	80.9	1 64	72.5	56.2	49.9	13 81	64.5
Dufferin	89.0	87.1	50.7	37.8	81.6	1 50	67.3	51.1	40.0	8 06	36.9
Dundas	97.1	96.9	58.3	43.4	80.3	1 54	67.5	57.6	51.1	12 71	61.1
Durham	91.7	87.1	53.6	40.2	85.3	1 69	69.1	54.2	50.0	10 32	38.9
Elgin	88.9	86.0	54.8	40.9	76.6	1 41	66.9	54.7	42.7	9 50	54.9
Essex	87.4	86.7	50.2	37.8	95.0	1 50	74.2	51.3	34.9	7 92	58.4
Frontenac	94.0	91.2	55.9	46.1	81.8	1 60	77.2	60.3	48.3	12 58	61.2
Glengarry	.....	94.0	58.6	41.8	89.5	1 56	.....	53.3	43.7	9 80	52.3
Grenville	97.0	93.9	55.6	45.6	86.0	1 66	67.0	54.9	50.0	14 00	54.9
Grey	88.9	87.1	49.8	37.2	80.5	1 57	69.0	52.7	40.2	8 56	36.2
Haldimand	87.5	85.8	51.5	39.5	79.2	1 58	63.3	51.2	43.5	8 28	55.1
Haliburton	.....	90.7	54.3	47.3	82.9	1 60	67.6	56.4	50.0	12 57	57.4
Halton	90.7	86.3	53.4	41.4	82.4	1 70	70.0	55.3	45.0	10 66	45.7
Hastings	91.3	89.1	55.9	46.9	84.8	1 52	66.2	58.3	47.9	12 79	55.3
Huron	88.8	87.5	49.4	37.1	83.1	1 29	57.5	51.6	41.5	8 24	39.2
Kent	88.8	86.7	52.8	37.4	80 5	1 49	69.2	48.0	36.9	8 34	56.0
Lambton	87.4	86.0	48.9	36.6	78.7	1 32	64.0	57.0	41.9	7 77	54.6
Lanark	95.3	96.1	58.0	45.5	78.3	1 66	72.0	52.0	49.5	13 78	62.2
Leeds	97.1	97.0	57.9	46.5	83.5	1 62	69.5	57.1	49.1	13 73	60.7
Lennox & Addington	90.2	92.8	55.5	43.6	83.3	1 45	71.4	54.3	47.1	10 90	56.5
Lincoln	87.2	84.9	53.6	41.6	79.8	1 62	69.2	56.0	49.5	10 92	56.5
Manitoulin	92.9	92.3	55.0	42.5	69.5	1 50	61.0	52.5	40.0	8 54	38.7
Middlesex	88.4	82.3	50.9	39.1	76.8	1 46	58.0	52.9	43.1	9 54	44.7
Muskoka	98.0	95.7	58.6	45.8	87.4	1 88	67.5	63.6	40.0	11 20	56.7
Nipissing	99.7	99.0	61.2	51.7	90.0	1 83	75.0	71.7	50.0	12 97	65.0
Norfolk	87.1	86.0	54.6	41.3	81.2	1 43	73.3	55.2	41.5	9 57	47.9
Northumberland	90.4	88.1	54.5	42.6	87.9	1 38	69.8	52.4	45.0	10 35	39.5
Ontario	90.6	87.5	52.3	40.4	84.2	1 50	68.4	53.3	38.8	9 88	42.3
Oxford	88.6	88.3	52.8	40.6	83.2	1 54	71.0	58.0	43.1	10 56	50.2
Parry Sound	96.7	96.6	61.4	49.4	89.2	1 50	72.8	59.3	42.0	12 71	53.5
Peel	90.2	86.9	54.2	40.2	84.3	1 38	70.4	53.2	46.7	9 67	41.6
Perth	89.8	87.8	49.0	37.3	78.6	1 53	72.0	58.0	48.0	8 60	39.6
Peterborough	93.1	89.7	54.1	41.6	91.0	1 51	66.7	52.8	45.0	12 23	55.3
Prescott	94.3	94.3	56.0	40.9	90.6	1 71	....	61.7	47.2	9 41	61.7
Prince Edward	90.4	90.7	55.3	46.8	84.5	1 49	72.8	55.2	47.2	12 82	54.8
Rainy River	98.0	98.0	61.9	50.2	90.0	1 50	.....	60.0	50.0	11 00	57.1
Renfrew	99.8	99.8	55.7	45.5	86.1	1 67	70.3	54.3	44.3	13 20	63.2
Russell	.....	94.4	57.4	42.5	94.1	1 53	70.0	62.8	51.3	10 60	62.7
Simcoe	89.9	89.3	51.8	38.6	82.2	1 57	66.0	52.1	49.5	11 08	36.5
Stormont	.....	95.2	58.4	42.9	87.4	1 52	73.8	57.0	47.3	11 56	62.8
Thunder Bay	.....	96.0	57 5	45.0	90.0	.....	.....	.....	.....	14 50	71.3
Victoria	88.6	84.6	50.3	37.8	82.2	1 53	66.9	52.9	45.0	11 47	46.0
Waterloo	89.4	82.0	53.8	41.1	81.9	1 66	75.0	59.7	44.8	11 37	43.9
Welland	86.6	83.3	56.2	43.0	76.0	1 79	66.5	56.7	44.5	9 86	61.9
Wellington	89 9	84.4	50.6	39.3	81.9	1 38	65.1	53.8	33.3	8 85	36.0
Wentworth	90.4	88.8	53.4	41.9	81.2	1 75	72.5	55.7	46.0	11 79	47.7
York	91.5	87.1	54.4	41.7	84.1	1 53	65.8	52.8	44.4	10 70	45.9
The Province:											
1908	89.2	90.8	52.4	40.3	82.7	1 48	69.7	54.2	40.0	10 25	47.9
1907	92.7	86.4	59.4	48.8	78.0	1 52	69.4	57.4	28.4	15 11	58.3
1906	70.7	68.9	45.0	34.0	70.6	1 39	60.9	49.5	37.6	9 10	53.8
1905	76.5	74.9	42.9	33.6	65.3	1 32	56.8	50.0	36.9	7 72	46.0
1904	98.7	94.2	43.7	32.3	63.0	1 22	57.6	48.6	37.4	7 97	50.7
1903	75.1	74.4	42.1	29.3	64.3	1 41	48.6	44.3	36.9	7 94	44.1
1902	70.7	69.6	45.1	34.8	71.0	1 35	50.5	48.0	40.6	8 15	56.5
1901	66.1	66.8	45.0	36.2	65.3	1 25	49.3	48.4	38.0	7 99	42.6
1900	66.4	67.5	38.9	26.5	57.1	1 00	48.5	43.7	31.7	8 48	26.1
1899	66.7	66.5	39.5	27.7	57.3	1 08	50.0	45.5	19.8	7 72	32.8
1882-1908	79.0	80.7	47.7	32.8	59.6	1 13	52.9	43.0	*30.1	9 12	42.1

* Average for seventeen years, 1892-1908.

HORSES AND

TABLE XIX.—Showing by County Municipalities the number and value of Horses and Cattle June 30th, 1908, together with the totals

Counties and Districts.	Horses all ages.				Cattle.	
	Number on hand.	Value.	Horses sold.		Milch cows on hand.	
			Number.	Value.	Number.	Value.
Algoma	3,314	$434,134	288	$33,696	5,263	$198,784
Brant	9,405	1,072,170	722	81,586	13,361	540,987
Bruce	27,192	3,344,616	3,108	404,040	29,435	1,101,752
Carleton	16,398	2,180,934	1,594	191,280	37,573	1,381,559
Dufferin	12,279	1,473,480	1,578	194,094	13,683	511,471
Dundas	8,510	944,610	887	103,779	29,328	1,128,248
Durham	14,433	1,760,826	1,440	177,120	16,785	649,915
Elgin	18,608	2,158,528	1,820	211,120	27,970	1,172,502
Essex	22,325	2,277,150	2,010	243,210	20,759	726,150
Frontenac	13,498	1,457,784	1,295	128,205	36,148	1,230,116
Glengarry	9,983	1,058,198	968	118,096	29,288	987,006
Grenville	7,363	795,204	624	62,400	20,814	684,572
Grey	31,506	3,875,238	3,068	389,636	38,444	1,405,128
Haldimand	12,190	1,365,280	1,187	147,188	14,842	574,979
Haliburton	1,823	204,176	217	21,917	3,380	97,378
Halton	9,195	1,149,375	734	89,548	12,285	523,095
Hastings	18,975	2,030,325	1,806	195,048	48,902	1,505,204
Huron	32,912	4,344,384	4,167	583,380	31,731	1,290,182
Kent	28,488	3,190,656	2,682	319,158	24,309	976,493
Lambton	24,743	2,721,730	2,877	345,240	26,961	1,016,430
Lanark	12,046	1,421,428	1,273	155,306	26,881	921,481
Leeds	11,414	1,141,400	1,179	121,437	36,153	1,224,502
Lennox & Addington	11,971	1,197,100	1,008	102,816	26,389	798,267
Lincoln	9,111	1,084,209	857	95,984	10,065	372,002
Manitoulin	2,544	277,296	268	28,140	3,687	128,344
Middlesex	35,054	4,031,210	3,839	491,392	49,778	2,018,498
Muskoka	3,406	408,720	404	41,612	5,929	194,946
Nipissing	3,226	435,510	222	25,086	4,499	164,079
Norfolk	14,539	1,613,829	1,206	142,308	19,010	681,699
Northumberland	16,870	1,923,180	1,503	174,348	27,219	924,902
Ontario	20,988	2,623,500	2,060	273,980	22,831	976,482
Oxford	20,698	2,483,760	1,756	228,280	46,414	1,992,553
Parry Sound	3,838	468,236	462	49,896	6,021	203,510
Peel	14,311	1,803,186	1,599	223,860	15,724	672,515
Perth	25,690	3,314,010	2,837	414,202	34,450	1,344,584
Peterborough	12,192	1,304,544	970	109,610	21,497	733,048
Prescott	9,211	1,003,999	730	88,330	24,784	757,399
Prince Edward	9,627	972,327	844	95,372	17,435	613,538
Rainy River	1,445	197,965	264	39,864	1,925	71,264
Renfrew	14,116	1,764,500	1,376	165,120	25,971	732,382
Russell	6,603	838,581	562	71,936	19,317	595,736
Simcoe	34,382	4,469,660	2,644	343,720	38,055	1,309,853
Stormont	7,624	831,016	552	64,584	25,366	906,074
Thunder Bay	585	87,750	19	1,900	1,044	41,760
Victoria	14,264	1,640,360	1,836	236,844	19,011	657,590
Waterloo	14,677	1,761,240	1,394	178,432	17,686	719,290
Welland	9,589	1,093,146	714	89,964	10,707	392,197
Wellington	24,791	2,950,129	2,319	292,194	27,525	1,263,948
Wentworth	12,788	1,521,772	751	87,867	16,488	649,297
York	25,731	3,345,030	2,694	404,100	30,252	1,319,895
The Province:						
1908	726,471	85,847,391	71,214	8,878,225	1,113,374	41,083,586
1907	725,666	85,041,144	*	*	1,152,071	41,970,012
1906	688,147	79,814,953	64,761	7,851,480	1,129,047	40,634,401
1905	672,781	73,911,177	62,588	7,419,783	1,106,984	38,810,859
1904	655,554	68,138,228	63,310	6,836,499	1,078,992	37,441,022
1903	639,581	61,811,456	61,967	6,448,523	1,050,108	35,861,188
1902	626,106	55,173,637	54,538	5,079,127	1,010,746	33,314,188
1901	620,343	50,038,465	50,755	4,347,582	984,012	31,232,541
1900	617,309	46,916,999	47,926	3,774,480	976,124	30,269,605
1899	615,524	42,713,557	45,367	3,204,006	974,474	29,536,307

*Not taken in 1907.

CATTLE.

on hand July 1, 1908, and the number and value of those sold or slaughtered in the year ending for the Province for the past ten years.

Cattle.						Counties and Districts.
Other cattle on hand.		Total on hand.		Sold or slaughtered.		
Number.	Value.	Number.	Value.	Number.	Value.	
8,974	$153,635	14,237	$352,419	4,608	$111,974	Algoma.
17,758	333,673	31,119	874,660	8,753	291,300	Brant.
83,031	2,006,859	112,466	3,108,611	36,360	1,435,129	Bruce.
44,419	883,938	81,992	2,265,497	20,027	633,254	Carleton.
33,194	652,262	46,877	1,163,733	14,598	559,103	Dufferin.
13,130	214,113	42,458	1,342,661	6,025	146,408	Dundas.
32,643	627,398	49,428	1,277,313	14,223	524,402	Durham.
42,209	841,225	70,179	2,013,727	22,713	757,479	Elgin.
33,453	574,053	54,212	1,300,203	14,389	413,828	Essex.
28,626	481,203	64,774	1,711,319	13,252	325,204	Frontenac.
19,022	313,102	48,310	1,300,108	6,900	164,565	Glengarry.
11,107	163,717	31,921	848,289	7,353	196,325	Grenville.
104,351	2,405,291	142,795	3,810,419	41,768	1,672,808	Grey.
25,173	523,850	40,015	1,098,829	11,267	374,177	Haldimand.
6,695	88,977	10,075	186,355	3,250	61,880	Haliburton.
21,782	472,016	34,067	995,111	10,523	452,594	Halton.
38,146	526,033	87,048	2,031,237	16,547	367,012	Hastings.
99,562	2,673,240	131,293	3,963,422	44,607	1,982,781	Huron.
54,464	1,295,154	78,773	2,271,647	25,968	935,108	Kent.
73,184	1,805,449	100,145	2,821,879	33,233	1,199,711	Lambton.
36,131	623,260	63,012	1,544,741	16,268	479,255	Lanark.
21,072	329,777	57,225	1,554,279	9,317	218,856	Leeds.
27,083	418,974	53,472	1,217,241	12,243	304,973	Lennox & Addington.
11,824	222,409	21,889	594,411	5,488	168,207	Lincoln.
9,051	159 841	12,738	288,185	4,370	113,402	Manitoulin.
100,838	2,605,654	150,616	4,624,152	50,402	2,090,171	Middlesex.
9,989	153,331	15,918	348,277	4,227	107,408	Muskoka.
6,852	107,782	11,351	271,861	2,694	65,464	Nipissing.
21,189	337,541	40,199	1,019,240	11,465	286,625	Norfolk.
30,760	554,295	57,979	1,479,197	14,411	401,202	Northumberland.
53,217	1,222,927	76,048	2,199,409	20,400	835,992	Ontario.
47,321	1,257,319	93,735	3,249,872	25,190	991,982	Oxford.
11,738	179,944	17,759	383,454	5,539	124,406	Parry Sound.
27,679	773,628	43,403	1,446,143	18,610	710,902	Peel.
70,598	1,523,505	105,048	2,868,089	31,889	1,189,141	Perth.
28,388	382,954	49,885	1,116,002	13,805	312,407	Peterborough.
17,852	233,147	42,636	990,546	6,352	160,706	Prescott.
12,190	229,416	29,625	842,954	5,488	122,108	Prince Edward.
3,312	72,168	5,237	143,432	1,243	32,529	Rainy River.
48,795	991,514	74,766	1,723,896	20,793	513,171	Renfrew.
15,480	244,274	34,797	840,010	6,901	141,609	Russell.
83,087	1,486,426	121,142	2,796,279	31,756	1,045,090	Simcoe.
11,020	173,124	36,386	1,079,198	4,736	114,185	Stromont.
1,198	26,356	2,242	68,116	810	20,226	Thunder Bay.
43,216	870,370	62,227	1,527,960	18,014	515,561	Victoria.
28,186	589,087	45,872	1,308,377	19,009	793,055	Waterloo.
16,109	326,368	26,816	718,565	10,644	323,790	Welland.
69,045	1,700,578	96,570	2,964,526	34,496	1,605,099	Wellington.
21,505	485,153	37,993	1,134,450	10,972	381,277	Wentworth.
35,837	855,071	66,089	2,174,966	24,166	960,115	York.
						The Province :
1,711,485	36,171,681	2,824,859	77,255,267	798,062	27,733,956	1908.
1,774,165	37,515,768	2,926,236	79,485,780	*	*	1907.
1,834,571	39,668,875	2,963,618	80,303,276	741,476	27,205,105	1906.
1,782,519	37,953,623	2,889,503	76,764,482	714,007	25,871,468	1905.
1,697,312	35,379,981	2,776,304	72,821,003	730,212	26,342,872	1904.
1,624,153	33,428,736	2,674,261	69,289,924	719,911	25,867,813	1903.
1,551,838	30,203,154	2,562,584	63,517,342	673,514	23,310,908	1902.
1,523,608	28,294,578	2,507,620	59,527,119	610,880	20,286,963	1901.
1,453,206	26,051,205	2,429,330	56,320,810	560,893	18,017,989	1900.
1,343,881	23,402,193	2,318,355	52,938,500	555,583	17,303,426	1899.

* Not taken in 1907.

SHEEP, SWINE

TABLE XX.—Showing by County Municipalities the numbers and values of Sheep, Swine and year ending June 30, 1908, together with the

Counties and Districts.	Sheep and Lambs.				Swine.	
	Number on hand.	Value.	Sold or slaughtered.		Number on hand.	Value.
			Number.	Value.		
Algoma	9,890	$ 43,912	3,852	$ 17,295	4,547	$ 35,012
Brant	12,590	82,465	7,153	38,340	30,417	201,969
Bruce	62,918	390,092	30,544	177,155	50,764	345,703
Carleton	20,951	104,545	9,140	46,980	31,907	224,625
Dufferin	28,069	145,959	12,530	62,775	32,352	230,346
Dundas	3,917	19,898	1,743	8,610	27,356	206,264
Durham	29,924	158,896	12,827	71,190	33,266	206,915
Elgin	30,950	179,201	11,826	66,699	72,396	434,376
Essex	19,742	101,869	6,066	27,782	124,615	809,998
Frontenac	24,178	129,594	14,248	64,116	24,680	187,321
Glengarry	8,257	42,689	3,304	15,925	18,455	141,919
Grenville	5,577	27,160	2,662	12,485	16,980	113,257
Grey	91,856	459,280	46,441	249,853	67,228	447,738
Haldimand	20,147	114,032	8,157	42,906	27,507	183,747
Haliburton	8,428	34,639	4,047	15,864	2,297	16,538
Halton	14,502	97,308	7,039	39,207	23,076	152,302
Hastings	39,788	169,497	17,581	71,379	48,467	382,889
Huron	39,709	243,813	18,782	107,057	61,547	402,517
Kent	17,842	103,662	8,544	48,188	117,506	688,585
Lambton	36,570	224,540	18,552	105,932	60,582	365,309
Lanark	30,447	153,148	13,762	68,810	20,985	145,846
Leeds	11,852	54,282	5,193	26,329	26,877	182,495
Lennox & Addington	15,102	91,669	9,328	46,267	21,431	160,947
Lincoln	12,756	79,087	6,170	32,269	16,774	118,089
Manitoulin	13,409	61,413	9,048	37,821	4,714	28,001
Middlesex	42,002	262,092	20,953	123,204	69,493	444,755
Muskoka	13,313	63,370	6,166	27,130	3,363	21,658
Nipissing	5,393	23,729	2,260	9,221	5,062	33,865
Norfolk	18,974	110,808	7,641	44,471	42,234	252,982
Northumberland	13,626	82,710	6,487	33,149	38,234	264,962
Ontario	42,572	259,263	18,858	107,302	54,563	376,485
Oxford	9,110	55,116	5,102	28,979	68,853	448,233
Parry Sound	15,108	71,612	7,432	32,775	4,885	33,707
Peel	16,040	109,232	6,889	45,605	28,497	204,608
Perth	20,066	121,600	8,149	44,820	63,899	433,235
Peterborough	17,650	84,367	7,601	35,497	25,651	166,475
Prescott	9,380	48,495	5,308	23,355	15,569	118,324
Prince Edward	7,661	34,781	3,454	13,505	16,797	120,938
Rainy River	1,214	8,207	206	1,403	1,877	16,893
Renfrew	58,335	260,757	22,826	99,521	21,870	167,743
Russell	5,922	36,006	2,952	16,767	16,287	127,201
Simcoe	66,521	353,892	27,372	144,524	87,836	605,190
Stormont	4,520	21,063	3,463	15,757	20,623	143,124
Thunder Bay	567	3,402	405	2,430	747	5,229
Victoria	35,192	177,720	16,753	73,881	34,396	218,415
Waterloo	13,196	81,683	6,180	33,557	51,324	348,490
Welland	13,758	79,796	6,490	36,149	15,100	117,025
Wellington	56,197	376,520	35,061	196,342	71,611	448,285
Wentworth	16,477	108,583	9,093	52,103	27,879	187,626
York	31,733	188,811	19,680	124,574	65,387	417,823
The Province:						
1908	1,143,898	6,336,265	545,320	2,867,255	1,818,763	12,135,979
1907	1,106,083	5,928,325	*	*	2,049,666	14,174,502
1906	1,304,809	6,721,119	574,416	2,596,429	1,819,778	12,770,708
1905	1,324,153	6,191,774	603,736	2,584,209	1,906,460	12,280,667
1904	1,455,482	6,425,100	687,144	2,896,391	2,008,984	12,921,743
1903	1,642,627	7,228,498	727,850	3,074,393	1,977,386	13,023,743
1902	1,715,513	7,634,284	732,994	3,110,882	1,684,635	11,262,265
1901	1,761,799	7,772,793	729,148	3,103,513	1,491,885	9,298,712
1900	1,797,213	7,711,496	790,058	2,872,609	1,771,641	9,598,153
1899	1,772,604	7,315,729	665,238	2,629,201	1,971,070	10,180,338

* Not taken in 1907.

AND POULTRY.

Poultry on hand on July 1, 1908, and the number and value of those sold or slaughtered in the totals for the Province for the past ten years.

Swine.		Poultry all classes.				Counties and Districts.
Sold or slaughtered.		Number on hand.	Value.	Sold or slaughtered.		
Number.	Value.			Number.	Value.	
5,040	$ 46,267	60,158	$ 24,665	21,552	$ 10,129	Algoma.
36,213	351,990	149,191	53,709	49,056	21,094	Brant.
69,522	705,648	398,524	151,439	104,492	48,066	Bruce.
34,524	347,657	300,787	123,323	139,943	67,173	Carleton.
36,294	383,628	167,780	65,434	54,706	24,618	Dufferin.
29,715	304,282	180,312	61,306	46,762	21,043	Dundas.
45,342	461,128	239,792	86,325	73,412	31,567	Durham.
72,208	762,516	373,469	126,979	126,973	59,677	Elgin.
112,329	1,097,454	506,053	156,876	183,557	71,587	Essex.
28,505	298,162	172,105	70,563	67,578	33,113	Frontenac.
20,645	226,269	145,352	52,327	50,724	21,304	Glengarry.
17,222	158,270	130,786	45,775	42,828	18,416	Grenville.
99,872	976,748	493,072	182,437	155,702	74,737	Grey.
29,817	308,606	189,050	69,949	73,716	32,435	Haldimand.
2,415	24,681	22,493	7,198	8,098	3,401	Haliburton.
26,770	287,778	140,793	56,317	68,950	31,028	Halton.
56,710	586,381	303,662	109,318	101,418	46,652	Hastings.
85,382	825,644	587,033	187,851	158,791	74,632	Huron.
119,640	1,227,506	591,581	195,222	175,173	85,835	Kent.
71,603	698,845	529,264	190,535	182,787	84,082	Lambton.
22,556	206,613	176,973	61,941	60,202	28,295	Lanark.
31,823	335,733	164,336	57,518	58,053	25,543	Leeds.
26,223	254,363	193,597	63,887	71,597	30,787	Lennox & Addington.
20,298	201,559	153,381	59,819	74,529	32,047	Lincoln.
4,859	43,537	34,268	11,308	12,019	5,409	Manitoulin.
82,928	845,866	764,124	275,085	223,019	104,819	Middlesex.
5,124	44,323	59,927	23,372	24,417	9,523	Muskoka.
4,662	47,552	52,720	22,142	16,622	8,145	Nipissing.
45,587	453,591	267,895	96,442	108,795	48,958	Norfolk.
52,862	552,408	291,473	107,845	80,852	38,000	Northumberland.
68,572	708,349	314,714	113,297	109,326	50,290	Ontario.
76,950	845,681	342,082	123,150	101,261	42,530	Oxford.
5,563	47,786	57,860	20,251	20,179	7,870	Parry Sound.
41,209	436,815	217,579	95,735	99,280	51,626	Peel.
86,648	906,338	429,592	150,357	103,770	48,772	Perth.
33,524	305,068	213,782	81,237	59,317	28,472	Peterborough.
13,520	148,585	137,188	48,016	48,815	23,431	Prescott.
20,623	228,297	143,482	48,784	37,518	15,007	Prince Edward.
2,246	29,827	26,986	10,255	7,565	3,707	Rainy River.
18,251	212,442	211,087	73,880	72,675	28,343	Renfrew.
12,990	156,789	111,187	40,027	38,040	17,498	Russell.
98,608	1,004,816	501,674	175,586	144,946	68,125	Simcoe.
20,759	210,081	148,620	52,017	43,799	18,396	Stormont.
513	4,555	16,685	6,173	5,472	2,298	Thunder Bay.
39,626	362,974	247,909	81,810	87,074	41,796	Victoria.
66,214	640,289	216,579	71,471	60,524	28,447	Waterloo.
18,392	175,092	192,297	73,040	96,714	39,653	Welland.
91,719	960,298	356,884	135,616	116,315	58,158	Wellington.
38,532	413,063	196,197	82,403	89,725	46,657	Wentworth.
78,795	738,309	363,278	159,842	150,112	82,562	York.
						The Province:
2,129,944	21,600,459	12,285,613	4,439,854	4,108,750	1,895,753	1908.
*	*	13,428,076	4,854,381	*	*	1907.
2,222,758	22,501,028	10,254,824	3,697,338	3,473,708	1,374,246	1906.
2,267,583	22,202,233	9,738,493	3,335,660	3,340,802	1,300,253	1905.
2,240,083	22,665,164	9,412,683	3,077,029	3,537,358	1,354,486	1904.
2,168,598	22,532,862	9,683,573	2,973,646	3,684,451	1,407,340	1903.
1,991,907	20,154,190	9,762,808	2,957,286	3,674,198	1,398,289	1902.
1,973,405	17,548,490	9,745,236	2,859,172	3,495,999	1,305,555	1901.
2,056,049	15,800,799	9,541,241	2,727,363	3,164,287	1,176,740	1900.
1,875,466	14,157,394	9,344,024	2,658,321	3,102,614	1,162,991	1899.

* Not taken in 1907.

WOOL.—BEES.

TABLE XXI. Showing by County Municipalities of Ontario the number, weight and value of fleeces of the wool clip in 1908, together with the totals of the Province for the past ten years; also the number of colonies of bees and the value of apiaries.

Counties and Districts	Clip of Wool.				Colonies of Bees.		
	No.	Pounds.	Lbs. per fleece.	Value.	No.	Value (including outfit).	Value per hive.
				$		$	$
Algoma	5,718	36,576	6.40	5,121	93	600	6.45
Brant	7,030	52,552	7.50	7,357	5,510	34,738	6.30
Bruce	34,044	218,925	6.43	30,650	6,049	45,166	7.47
Carleton	11,280	67,093	5 95	9,393	6,026	29,909	4.96
Dufferin	14.224	95,211	6.69	13,330	3,127	17,828	5.70
Dundas	2,379	14,682	6.17	2,055	2,761	15,458	5.60
Durham	17,590	135,216	7.69	18,930	4,061	19,217	4.73
Elgin	16,084	98,780	6.14	13,829	5,537	31,883	5.76
Essex	11,126	74,170	6.67	10,384	7,161	35,865	5.01
Frontenac	13,449	76,697	5.70	10,738	5,020	29,012	5.78
Glengarry	4,325	28,282	6.54	3,959	4,838	24,171	5.00
Grenville	3,119	18,209	5.84	2,549	3,924	21,991	5.60
Grey	51,900	339,171	6.54	47,484	6,389	40,816	6.39
Haldimand	10,140	65,050	6.42	9,107	5,378	31,568	5.87
Haliburton	5,127	29,225	5.70	4,092	770	4,472	5.81
Halton	7,609	54,848	7.21	7,679	1,021	6,794	6.65
Hastings	22,904	122,092	5.33	17,093	3,915	23,457	5.99
Huron	21,515	136,250	6.33	19,075	7,249	46,843	6.46
Kent	9,146	71,745	7.84	10,044	5,435	27,888	5.18
Lambton	20,646	135,953	6.58	19,033	6,915	37,299	5.39
Lanark	16,036	88,873	5.54	12,442	4,853	24,272	5.00
Leeds	6,172	35,547	5.76	4,977	2,987	15,134	5.01
Lennox & Addington	8,088	49,555	6.13	6,938	3,961	20,396	5.15
Lincoln	7,599	48,378	6.37	6,773	1,890	11,364	6.01
Manitoulin	7,613	50,118	6.58	7,017	1,007	7,480	7.43
Middlesex	22,285	161,913	7.27	22,668	13,521	77,449	5.73
Muskoka	7,852	45,829	5.84	6,416	213	1,340	6.29
Nipissing	3,162	18,647	5.90	2,611	90	534	5.93
Norfolk	10,026	65,416	6.52	9,158	4,910	29,793	6.07
Northumberland	8,920	65,969	7.40	9,236	6,275	32,932	5.25
Ontario	25,164	194,960	7.75	27,294	2,799	17,162	6.13
Oxford	4,979	34,976	7.02	4,897	2,613	17,013	6.51
Parry Sound	9,678	60,026	6.20	8,404	156	951	6.10
Peel	8,381	65,626	7.83	9,188	2,316	15,527	6.70
Perth	10,315	64,436	6.25	9,021	4,206	25,297	6.01
Peterborough	10,159	60,714	5.98	8,500	1,055	6,198	5.87
Prescott	5,056	32,756	6.48	4,586	6,638	40,907	6.16
Prince Edward	4,217	24,301	5.76	3,402	1,701	8,372	4 92
Rainy River	706	4,459	6.32	624			
Renfrew	32,022	159,252	4.97	22,295	4,927	24,878	5.05
Russell	3,550	21,932	6.18	3,070	939	4,732	5.04
Simcoe	37,269	265,397	7.12	37,155	4,330	17,674	4.08
Stormont	2,436	15,106	6.20	2,115	2,198	10,764	4.90
Thunder Bay	234	1,332	5.69	186			
Victoria	20,636	120,861	5.86	16,921	3,197	20,845	6.52
Waterloo	6,245	42,903	6.87	6,006	1,266	8,027	6.34
Welland	7,907	45,938	5.81	6,431	3,823	19,538	5.11
Wellington	31,614	236,672	7.49	33,134	1,562	9,545	6.11
Wentworth	9,475	67,981	7.18	9,517	2,116	14,440	6.82
York	18,297	129,910	7.10	18,187	2,960	21,060	7.11
The Province:							
1908	635,448	4,150,510	6.53	581,071	179,688	1,028,599	5.72
1907	*	*	*	*	*	*	*
1906	684,808	4,543,981	6.64	727,037	196,387	1,112,236	5.66
1905	703,388	4,634,922	6.59	764,762	204,033	1,145,919	5.62
1904	778,837	4,972,042	6.38	581,729	201,064	1,146,592	5.70
1903	865,503	5,419,900	6.26	541,990	207,936	1,180,165	5.68
1902	916,092	5,690,673	6.21	728,406	202,529	1,150,523	5.68
1901	950,229	5,834,097	6.14	781,769	202,247	1,114,099	5.51
1900	957,307	5,805,921	6.06	894,112	216,734	1,139,559	5.26
1899	928,184	5,525,122	5.95	790,092	203,343	1,053,454	5.18

* Not taken in 1907.

FARM PROPERTY, IMPLEMENTS AND LIVE STOCK.

TABLE XXII.—Showing by County Municipalities of Ontario the value of farm lands, buildings, implements and live stock for the year 1908, and the value of live stock sold or killed in the year ending June 30, 1908, together with the totals for the Province for the past ten years.

Counties and Districts.	Land.	Buildings.	Implements.	Live Stock.	Total.	Value of Live Stock sold or killed.
	$	$	$	$	$	$
Algoma	3,439,808	990,172	409,630	890,142	5,729,752	219,361
Brant	8,592,834	4,502,221	1,151,249	2,284,973	16,531,277	784,310
Bruce	25,532,603	10,275,343	2,377,526	7,340,461	45,525,933	2,770,038
Carleton	20,281,696	7,352,675	1,955,414	4,898,924	34,488,709	1,286,344
Dufferin	11,310,385	4,601,452	1,119,357	3,078,952	20,110 146	1,224,218
Dundas	8,799,292	4,048,745	1,219,728	2,574,739	16,642,504	584,122
Durham	12,575,690	5,604,447	1,390,608	3,490,275	23,061,020	1,265,407
Elgin	17,815,279	7,728,460	1,923,459	4,912,811	32,380,009	1,857,491
Essex	18,476,451	7,152,646	2,186,522	4,646,096	32,461,715	1,853,861
Frontenac	10,487,223	4,771,000	1,474,603	3,556,581	20,289,407	848,809
Glengarry	8,950,333	4,096,218	1,119,396	2,595,241	16,761,188	546,159
Grenville	6,959,878	3,420,007	850,708	1,829,685	13,060,278	447,896
Grey	25,730,282	13,326,528	3,375,488	8,775,112	51,207,410	3,363,782
Haldimand	8,515,627	4,560,914	1,273,066	2,831,837	17,181,444	905,312
Haliburton	1,234,188	483,559	170,751	448,906	2,337,404	127,743
Halton	9,604,303	4,385,456	976,498	2,450,413	17,416,670	900,155
Hastings	17,304,240	6,742,788	2,022,692	4,723,266	30,792,986	1,266,472
Huron	29,569,682	12,907,680	2,920,251	9,141,987	54,539,600	3,573,494
Kent	25,882,115	10,055,934	3,004,957	6,449,772	45,392,778	2,615,795
Lambton	21,945,106	8,613,882	2,315,681	6,323,993	39,198,662	2,433,810
Lanark	11,568,440	4,172,948	1,150,592	3,327,104	20,219,084	938,279
Leeds	11,315,626	4,726,032	1,212,774	2,989,974	20,244,406	727,898
Lennox and Add	9,877,809	4,738,632	1,277,997	2,730,844	18,625,282	739,206
Lincoln	9,498,176	4,362,131	1,090,793	1,935,615	16,886,715	530,066
Manitoulin	1,616,179	618,120	237,855	666,203	3,138,357	228,309
Middlesex	34,606,839	14,061,793	3,249,507	9,637,294	61,555,433	3,655,452
Muskoka	2,789,546	1,205,840	396,588	865,397	5,257,371	229,996
Nipissing	3,569,461	987,709	421,471	787,107	5,765,748	155,468
Norfolk	12,240,463	5,694,719	1,566,799	3,093,801	22,595,282	975,953
Northumberland	14,779,058	6,860,065	1,762,692	3,857,894	27,259,709	1,199,107
Ontario	18,567,702	7,744,097	1,919,217	5,571,954	33,802,970	1,975,913
Oxford	22,381,595	9,994,023	2,358,356	6,360,131	41,094,105	2,137,452
Parry Sound	2,518,583	1,129,913	417,740	977,260	5,043,496	262,733
Peel	12,967,415	6,233,320	1,308.708	3,658,904	24,168,347	1,468,808
Perth	23,185,157	10,192,301	2,375,662	6,887,291	42.640,411	2,603,273
Peterborough	11,948,322	4,157,715	1,117,622	2,752,625	19,976,284	791,054
Prescott	9,634,805	4,166,254	1,199,736	2,209,380	17,210,175	444,407
Prince Edward	7,591,529	3,670,228	1,024,808	2,019,784	14,306,349	474,289
Rainy River	1,546,592	350,498	126,253	376,752	2,400,095	107,330
Renfrew	13,493,545	5,130,136	1,756,157	3,990,776	24,370,614	1,018,597
Russell	7,137,030	2,835,110	775,105	1,881,825	12,629,070	404,599
Simcoe	29,604,143	12,581,511	3,346,238	8,400,607	53,932,499	2,606,275
Stormont	7,479,035	3,346,400	803,300	2,126,418	13,755,153	423,003
Thunder Bay	1,195,969	180,366	69,427	170,670	1,616,432	31,409
Victoria	13,168,592	4,775,566	1,322,619	3,646,265	22,913,042	1,231,056
Waterloo	12,839,359	6,486,638	1,528,626	3,571,261	24,425,884	1,673,780
Welland	9,226,335	4,382,392	1,043,897	2,081,572	16,734,196	664,648
Wellington	23,008,832	10,924,021	2,438,447	6,875,076	43,246,376	3,112,091
Wentworth	12,963,741	6,194,910	1,470,210	3,034.834	23,663,695	980,967
York	26,204,125	10,656,606	2,478,950	6,286,472	45,626,153	2,309,660
The Province:						
1908	671,531,018	288,180,121	74,485,730	186,014,756	1,220,211,625	62,975,648
1907	674,505,427	284,672,238	72,910,875	189,484,132	1,221,572,672	*
1906	661,199,920	273,414,187	71,197,619	183,307,394	1,189,119,120	61,528,288
1905	649,201,364	264,384,514	68,629,546	172,483,760	1,154,699,184	59,378,046
1904	640,544,541	257,995,484	65,992,210	163,383,103	1,127,915,338	60,095,412
1903	620,869,475	247,629,153	63,996,190	154,327,267	1,086,822,085	59,330,931
1902	604,860,063	237,289,668	62,199,787	140,544,814	1,044,894,332	53,083,396
1901	585,354,294	226,575,228	59,897,513	129,496,261	1,001,323,296	46,592,103
1900	574,727,610	219,488,370	57,324,130	123,274,821	974,814,931	41,642,617
1899	563,271,777	213,440,281	54,994,857	115,806,445	947,513,360	38,457,018

* Not taken in 1907.

FARM VALUES AND RENTALS PER ACRE.

TABLE XXIII.—Showing by County Municipalities of Ontario, average values per acre of farm property in 1908, together with the average for the Province for the past ten years.

Counties and Districts.	Farm values, average per acre occupied.					Values buildings, implements and live stock, per acre, cleared.	Rent per acre on land.	
	Land.	Buildings.	Implements.	Live Stock.	Total.		Occupied.	Cleared
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Algoma	7 04	2 03	84	1 82	11 73	38 74	82	2 19
Brant	39 80	20 85	5 33	10 58	76 56	44 83	2 48	2 85
Bruce	27 54	11 09	2 56	7 92	49 11	35 99	1 75	2 31
Carleton	35 89	13 01	3 46	8 67	61 03	40 87	1 96	2 64
Dufferin	31 68	12 89	3 13	8 62	56 32	34 15	1 84	2 24
Dundas	37 07	17 06	5 14	10 85	70 12	47 73	1 90	2 60
Durham	33 81	15 07	3 74	9 38	62 00	34 85	2 23	2 62
Elgin	40 82	17 71	4 41	11 25	74 19	41 51	2 46	3 08
Essex	43 32	16 77	5 13	10 89	76 11	43 00	2 40	2 96
Frontenac	15 03	6 84	2 11	5 10	29 08	33 62	1 36	2 00
Glengarry	31 29	14 32	3 91	9 07	58 59	39 58	1 39	2 18
Grenville	25 53	12 54	3 12	6 71	47 90	33 39	1 45	1 88
Grey	24 07	12 46	3 16	8 21	47 90	36 76	1 53	2 10
Haldimand	30 26	16 21	4 52	10 06	61 05	36 48	1 75	2 12
Haliburton	2 12	83	29	77	4 01	27 37	61	1 19
Halton	42 91	19 59	4 36	10 95	77 81	45 88	2 03	2 79
Hastings	16 41	6 40	1 92	4 48	29 21	31 84	1 26	1 91
Huron	37 03	16 17	3 66	11 45	68 31	38 52	2 06	2 44
Kent	45 59	17 71	5 29	11 36	79 95	42 39	2 78	3 31
Lambton	33 28	13 06	3 51	9 59	59 44	37 37	1 87	2 53
Lanark	17 35	6 26	1 73	4 99	30 33	27 14	1 19	1 88
Leeds	23 92	9 99	2 56	6 32	42 79	33 69	1 86	2 75
Lennox & Addington	22 23	10 67	2 88	6 15	41 93	33 43	1 36	2 13
Lincoln	49 63	22 79	5 70	10 11	88 23	45 22	2 24	2 76
Manitoulin	6 14	2 35	90	2 53	11 92	33 85	75	1 73
Middlesex	45 68	18 56	4 29	12 72	81 25	41 35	2 29	2 89
Muskoka	4 90	2 12	70	1 52	9 24	38 35	59	2 05
Nipissing	5 80	1 60	68	1 28	9 36	36 46	1 00	2 69
Norfolk	30 75	14 30	3 94	7 77	56 76	38 15	1 96	2 49
Northumberland	33 83	15 71	4 04	8 83	62 41	36 74	1 94	2 42
Ontario	36 81	15 35	3 81	11 05	67 02	41 36	2 33	2 86
Oxford	47 49	21 21	5 00	13 50	87 20	47 35	2 76	3 36
Parry Sound	4 14	1 86	69	1 61	8 30	33 09	39	1 76
Peel	44 94	21 60	4 53	12 68	83 75	42 99	2 40	2 75
Perth	44 70	19 65	4 58	13 28	82 21	43 92	2 24	2 70
Peterborough	20 82	7 24	1 95	4 79	34 80	31 21	1 23	2 10
Prescott	32 77	14 17	4 08	7 52	58 54	37 55	1 54	2 49
Prince Edward	32 73	15 83	4 42	8 71	61 69	34 56	2 19	2 63
Rainy River	5 35	1 21	44	1 30	8 30	36 25	72	1 92
Renfrew	13 16	5 00	1 71	3 89	23 76	31 86	1 22	2 00
Russell	28 45	11 30	3 09	7 50	50 34	43 95	1 82	2 41
Simcoe	30 59	13 00	3 46	8 68	55 73	37 86	1 94	2 43
Stormont	29 91	13 39	3 21	8 51	55 02	45 37	1 45	2 39
Thunder Bay	3 77	57	22	54	5 10	42 27	1 25	2 50
Victoria	22 01	7 98	2 21	6 10	38 30	34 30	2 06	2 75
Waterloo	41 75	21 10	4 97	11 61	79 43	45 72	2 26	2 76
Welland	40 31	19 15	4 56	9 09	73 11	40 42	1 82	2 34
Wellington	36 60	17 38	3 88	10 94	68 80	41 03	2 01	2 50
Wentworth	47 92	22 90	5 43	11 22	87 47	50 24	2 81	3 40
York	48 77	19 84	4 61	11 70	84 92	44 23	2 86	3 30
The Province								
1908	27 41	11 77	3 04	7 59	49 81	38 82	1 92	2 53
1907	27 65	11 67	2 99	7 77	50 08	38 75	*	*
1906	27 23	11 26	2 93	7 55	48 97	37 42	2 00	2 65
1905	26 84	10 92	2 84	7 14	47 74	36 28	1 96	2 55
1904	26 53	10 69	2 73	6 77	46 72	35 29	1 91	2 49
1903	25 95	10 35	2 67	6 45	45 42	34 15	1 89	2 47
1902	25 49	10 00	2 62	5 93	44 01	32 43	1 85	2 47
1901	24 76	9 59	2 53	5 48	42 36	30 96	1 82	2 46
1900	24 37	9 31	2 43	5 23	41 34	30 09	1 80	2 48
1899	24 02	9 10	2 34	4 94	40 40	29 31	1 77	2 51

* Not taken in 1907.

AGRICULTURAL STATISTICS OF THE UNITED STATES.

Wheat.

Year.	Acres.	Bushels.	Average yield per acre.	Total value.
				$
1908	47,557,000	664,602,000	14.0	616,826,000
1907	45,211,000	634,087,000	14.0	554,437,000
1906	47,305,829	735,260,970	15.5	490,332,760
1905	47,854,079	692,979,489	14.5	518,372,727
1904	44,074,875	552,399,517	12.5	510,489,874
1903	49,464,967	637,821,835	12.9	443,024,826
1902	46,202,424	670,063,008	14.5	422,224,117
1901	49,895,514	748,460,218	15.0	467,350,156
1900	42,495,385	522,229,505	12.3	323,525,177
1899	44,592,516	547,303,846	12.3	319,545,259
1898	44,055,278	675,148,705	15.3	392,770,320
1897	39,465,066	530,149,138	13.4	428,547,121
1896	34,618,646	427,684,346	12.4	310,602,539
1895	34,047,332	467,102,947	13.7	237,938,998
1894	34,884,436	460,267,416	13.2	225,902,025
1893	34,629,418	396,131,725	11.4	213,171,381
1892	38,554,430	515,949,000	13.4	322,111,881
1891	39,916,897	611,780,000	15.3	513,472,711

Corn.

Year.	Acres.	Bushels.	Average yield per acre.	Total value.
1908	101,788,000	2,668,651,000	26.2	1,616,145,000
1907	99,931,000	2,592,320,000	25.9	1,336,901,000
1906	96,737,581	2,927,416,091	30.3	1,166,626,479
1905	94,011,369	2,707,993,540	28.8	1,116,696,738
1904	92,231,581	2,467,480,934	26.8	1,087,461,440
1903	88,091,993	2,244,176,925	25.5	952,868,801
1902	94,043,613	2,523,648,312	26.8	1,017,017,349
1901	91,349,928	1,522,519,891	16.7	921,555,763
1900	83,320,872	2,105,102,526	25.3	751,220,034
1899	82,108,587	2,078,113,933	25.3	629,210,110
1898	77,721,781	1,924,184,660	24.8	552,023,428
1897	80,095,051	1,902,967,933	23.8	501,072,952
1896	81,027,156	2,283,875,165	28.2	491,006,967
1895	82,075,830	2,151,138,580	26.2	544,985,534
1894	62,582,269	1,212,770,052	19.4	554,719,162
1893	72,026,465	1,619,496,131	22.5	591,625,627
1892	70,626,658	1,628,464,000	23.1	642,146,630
1891	76,204,515	2,060,154,000	27.0	836,439,228

Other Crops.

	1908.		1907.		1906.	
	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.
Oats	32,344,000	807,156,000	31,837,000	754,443,000	30,958,768	964,904,522
Barley	6,646,000	166,756,000	6,448,000	153,597,000	6,323,757	178,916,484
Rye	1,948,000	31,851,000	1,926,000	31,566,000	2,001,904	33,374,833
Buckwheat	803,000	15,874,000	800,000	14,290,000	789,208	14,641,937

Figures for United States are in Winchester bushels.

CROPS IN THE NORTHWEST PROVINCES OF CANADA.

Year.	Wheat.		Oats.		Barley.		Flax.	
	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.
Alberta.								
1902	45,064	850,122	118,997	3,776,976	22,201	473,108	373	4,476
1903	63,391	1,200,598	162,314	5,187,511	42,219	1,077,274	830	7,753
1904	55,707	938,200	180,698	5,609,496	61,549	1,608,241	367	5,003
1905	107,527	2,306,524	242,801	9,514,180	64,830	1,773,914	581	8,337
1906	177,127	3,966,020	335,728	13,136,913	73,588	2,157,957	3,647	38,491
1907	207,900	4,194,535	307,093	9,247,914	54,698	1,082,460	6,488	50,002
1908	317,663	7,094,925	431,145	15,922,974	77,867	1,949,164	9,262	73,762
Saskatchewan								
1902	580,860	13,110,330	193,200	6,975,796	14,275	298,632	16,694	153,709
1903	777,822	15,121,015	280,096	9,164,007	27,679	665,593	31,614	285,697
1904	910,359	15,944,730	346,530	10,756,350	24,650	698,336	15,917	166,434
1905	1,130,084	26,107,286	449,936	19,213,055	32,946	893,396	25,315	398,399
1906	1,730,586	37,040,098	639,893	23,965,528	53,565	1,316,415	76,005	710,689
1907	2,047,724	27,691,601	801,810	23,324,903	79,339	1,350,265	128,528	1,364,716
1908	3,703,563	50,654,629	1,772,976	48,379,838	229,574	3,965,724	264,728	2,589,352
Manitoba.								
1894	1,010,186	17,172,883	413,686	11,907,854	119,528	2,981,716	30,500	336,000
1895	1,140,276	32,775,038	482,653	22,555,733	153,839	5,645,036	.....	1,281,354
1896	1,099,598	14,371,806	442,445	12,502,318	127,885	3,171,747	.....	259,143
1897	1,290,882	18,261,950	468,141	10,629,513	153,266	3,183,602	.....	247,836
1898	1,488,232	25,313,745	514,824	17,308,252	158,058	4,277,927	.....	350,000
1899	1,629,995	27,922,230	575,136	22,318,378	182,912	5,379,156	21,780	304,420
1900	1,457,396	13,025,252	429,108	8,814,312	155,111	2,939,477	20,437	164,313
1901	2,011,835	50,502,085	689,951	27,796,588	191,009	6,536,155	20,978	226,420
1902	2,039,940	53,077,267	725,060	34,478,160	329,790	11,848,422	41,200	564,440
1903	2,442,873	40,116,878	855,431	33,035,774	326,537	8,707,252	55,900	586,950
1904	2,412,235	39,162,458	943,574	36,289,979	361,004	11,177,970	35,428	461,106
1905	2,643,588	55,761,417	1,031,239	45,484,025	432,298	14,064,176	24,770	326,964
1906	3,141,537	61,250,413	1,155,961	50,692 978	474,242	17,532,554	18,790	274,330
1907	2,789,553	39,688,266	1,213,596	42,140,744	649,570	16,752,724	25,915	317,347
1908	2,850,640	49,252,539	1,216,632	44,686,043	658,441	18,135,757	50,187	502,206

OTHER CROPS IN MANITOBA.

Year.	Rye.		Peas.		Potatoes.		Roots.	
	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.
1894	.....	59,924	.....	18,434	.....	2,035,336	7,880	1,841,942
1895	.....	81,082	.....	28,229	16,716	4,042,562	6,786	2,285,283
1896	.....	52,255	.....	23,383	12,260	1,962,490	6,715	1,898,805
1897	.....	48,344	.....	33,380	13,576	2,033,298	6,130	1,220,070
1898	.....	63,860	.....	31,880	19,781	3,253,038	8,448	2,471,715
1899	3,217	64,340	1,366	20,490	19,151	3,226,395	10,079	2,670,108
1900	2,480	25,792	780	9,048	16,880	2,226,880	7,482	1,452,780
1901	2,707	62,261	879	16,349	24,429	4,797,433	10,214	2,925,362
1902	2,559	49,900	1,596	34,154	22,005	3,459,325	12,175	3,230,995
1903	4,899	88,182	2,357	41,483	27,198	4,757,000	12,251	3,452,340
1904	6,293	125,860	2,562	51,240	24,471	3,799,569	14,870	3,741,580
1905	6,923	173,075	2,081	53,706	25,835	4,759,646	13,411	3,481,653
1906	4,195	100,680	2,550	67,302	25,043	4,702,595	13,001	3,446,432
1907	6,029	83,681	1,684	27,521	32,388	5,092,161	9,877	2,514,291
1908	17,611	334,609	6,903	147,033	29,963	5,148,696	13,592	3,419,690

Canadian figures are given in Imperial bushels.

PART II.—CHATTEL MORTGAGES.

Table showing by County Municipalities of Ontario the total number and amount of Chattel Mortgages on record and undischarged on December 31st, 1908, against (1) all occupations, (2) farmers; together with totals for the Provinces for the past ten years.

Counties and Districts.	Chattel mortgages against all occupations.				Chattel mortgages against farmers.			
	To secure existing debt.		For future indorsation.		To secure existing debt.		For future indorsation.	
	No.	Amount.	No.	Amount.	No.	Amount.	No.	Am'nt.
		$		$		$		$
Algoma	187	**525,875	1	20,000	97	29,997	....	.....
Brant	253	173,896	....	.....	109	68,605	....	.....
Bruce	415	190,481	1	25	271	97,736	....	.....
Carleton	497	§1,115,039	9	6,582	64	27,736	3	1,323
Dufferin	115	163,547	....	.....	82	40,874	....	.....
Elgin	437	201,822	....	.....	194	59,829	....	.....
Essex	488	240,964	3	2,250	231	92,069	....	.....
Frontenac	374	190,357	....	.....	282	113,979	....	.....
Grey	652	336,668	....	.....	445	136,655	....	.....
Haldimand	126	69,969	....	.....	79	38,580	....	.....
Haliburton	83	36,473	2	5,950	72	10,168	....	.....
Halton	87	84,978	....	.....	27	14,617	....	.....
Hastings	608	382,732	....	.....	443	118,332	....	.....
Huron	273	217,745	....	.....	152	105,685	....	.....
Kent	929	340,577	....	.....	729	232,814	....	.....
Lambton	528	300,381	....	.....	313	99,840	....	.....
Lanark	153	104,006	1	100	70	22,301	1	100
Leeds and Grenville	198	96,432	1	6,229	106	40,393	....	.....
Lennox and Addington	193	89,297	3	1,610	109	56,092	1	35
Lincoln	155	128,506	6	63,791	57	24,617	2	1,500
Manitoulin	107	35,506	1	1,000	80	14,047	1	1,000
Middlesex	371	277,902	2	7,210	99	47,703	....	.....
Muskoka	207	155,426	1	1,000	83	20,549	....	.....
Nipissing	429	*1,269,658	....	.....	154	46,721	....	.....
Norfolk	276	68,849	....	.....	199	38,783	....	.....
Northumberland	427	245,847	....	.....	251	118,441	....	.....
Ontario	248	136,805	1	1,000	162	68,806	....	.....
Oxford	206	139,744	....	.....	77	36,101	....	.....
Parry Sound	229	†1,002,246	1	300	137	19,992	....	.....
Peel	68	83,276	....	.....	47	27,178	....	.....
Perth	191	294,470	....	.....	84	48,052	....	.....
Peterborough	232	239,550	....	.....	164	131,370	....	.....
Prescott	171	88,102	....	.....	94	32,316	....	.....
Prince Edward	133	79,967	3	860	97	45,626	3	860
Rainy River	71	205,638	....	.....	19	8,568	....	.....
Renfrew	258	160,448	1	25,000	178	71,627	....	.....
Simcoe	693	711,629	....	.....	483	198,656	....	.....
Stormont, Dundas & Glengarry	242	124,163	16	7,889	146	69,210	7	2,883
Thunder Bay	95	158,250	2	775	10	3,232	1	200
Victoria	161	84,653	1	10,000	111	40,853	....	.....
Waterloo	199	142,464	3	2,603	33	32,984	....	.....
Welland	257	‡749,763	5	29,013	69	14,554	....	.....
Wellington	245	195,670	....	.....	102	84,955	....	.....
Wentworth	650	521,040	7	18,080	139	59,718	4	1,657
York	1,310	‖1,904,761	13	45,773	147	57,825	....	.....
The Province :								
1908	14,227	14,065,572	84	257,040	7,098	2,768,786	23	9,558
1907	13,166	22,294,218	109	1,172,480	6,438	2,442,589	31	13,015
1906	14,640	14,927,312	97	416,520	6,993	2,709,016	25	7,614
1905	16,355	17,218,030	96	1,154,328	7,403	2,758,046	29	10,344
1904	15,568	13,656,740	94	472,761	7,100	2,559,195	42	25,034
1903	14,885	14,354,605	187	491,978	7,085	2,548,758	88	19,446
1902	15,684	10,890,615	142	1,099,188	7,193	2,616,538	42	21,387
1901	16,299	10,613,564	247	237,445	7,757	2,854,759	134	30,207
1900	17,321	11,669,806	307	499,184	8,440	3,110,543	121	39,840
1899	18,216	11,067,664	291	324,628	9,392	2,988,853	124	34,798

NOTE.—In 1907 were 5 Corporations for $7,500,000. These do not appear in 1908.
* Including 20 lumbermen for $762,340. † Including 21 lumbermen for $898,837.
‡ Including 1 Construction Co. for $500,000. ** Including 10 lumbermen for $364,764.
§ Including 3 Companies for $785,000. ‖ Including 206 hotels for $1,030,694.

ANNUAL REPORT

OF THE

BUREAU OF INDUSTRIES

FOR THE

PROVINCE OF ONTARIO

1908

PART III---MUNICIPAL STATISTICS

(PUBLISHED BY THE ONTARIO DEPARTMENT OF AGRICULTURE, TORONTO)

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PART III.—MUNICIPAL STATISTICS.

POPULATION, ASSESSMENT AND MUNICIPAL DEBT.

The following statement is compiled from the summarized tables and gives population, total assessment, amount of taxes imposed, the amount of debentnre and floating debt, of all municipalities of the Province for the the twenty-three years, 1886-1908.

Year.	Population.	Total assessment.	Taxes imposed for all purposes, including schools.			†Debenture debt for all purposes.		Floating debt.
			Total.	Rate per head.	Mills on the dollar.	Total.	Rate per head.	
		$	$	$ c.		$	$ c.	$
1908..	2,245,290	1,202,796,995	20,979,084	9 34	17.44	*	*	*
1907..	2,200,363	1,148,980,112	19,529,258	8 88	17.00	83,980,184	38 17	15,721,344
1906..	2,142,746	1,103,504,688	18,021,428	8 41	16.33	77,898,323	36 35	12,566,149
1905..	2,101,260	1,036,910,130	16,589,522	7 90	16.00	73,590,591	35 02	10,671,987
1904..	2,076,970	906,105,659	15,553,950	7 49	17.17	68,195,775	32 83	9,509,932
1903..	2,056,516	888,495,028	14,764,032	7 18	16.62	63,927,539	31 09	8,526,493
1902..	2,037,267	859,943,263	14,146,831	6 94	16.45	61,179,468	30 03	7,760,872
1901..	2,028,889	835,697,607	13,341,355	6 58	15.96	59,496,650	29 32	7,223,781
1900..	2,013,860	822,435,670	12,992,821	6 45	15.80	57,172,802	28 39	7,768,033
1899..	2,010,748	816,765,473	12,535,284	6 23	15.35	56,389,603	28 04	6,302,266
1898..	2,001,350	809,184,833	12,222,966	6 10	15.11	54,506,372	27 11	6,883,735
1897..	1,990,977	803,625,377	12,206,325	6 13	15.19	53,577,475	26 91	6,482,953
1896..	1,972,286	814,917,633	12,122,785	6 15	14.88	52,948,275	26 85	6,261,394
1895..	1,957,390	821,466,166	12,316,429	6 29	14.99	51,895,991	26 51	5,834,129
1894..	1,936,219	826,179,370	12,320,312	6 36	14.91	49,724,587	25 68	6,669,567
1893..	1,910,059	825,530,052	12,512,660	6 56	15.17	48,083,243	25 17	6,796,422
1892..	1,909,527	825,211,127	11,803,570	6 18	14.30	47,166,962	24 70	6,469,899
1891..	1,922,121	818,847,394	11,767,748	6 12	14.37	43,888,853	22 83	7,629,730
1890..	1,917,544	798,616,271	10,897,485	5 68	13.65	40,720,985	21 24	8,387,186
1889..	1,906,901	761,905,816	10,249,198	5 37	13.45	38,988,332	20 41	6,493,519
1888..	1,880,145	748,654,570	9,919,962	5 28	13.25	34,729,527	18 47	6,437,363
1887..	1,848,457	717,311,938	9,300,113	5 03	12.97	31,943,320	17 28	5,645,208
1886..	1,828,495	694,380,659	9,009,385	4 93	12.97	29,924,863	16 37	4,841,717

*Statistics of debts for 1908 are not yet complete.

† The amount accumulated in Sinking Funds on Dec. 31, 1907, was $15,768,040.

FINANCIAL STATEMENT—TOWNSHIP MUNICIPALITIES.

Summary Statement showing the totals for all townships in Ontario of the several items of Receipts, Disbursements, Assets and Liabilities for the ten years ending December 31st, 1898-1907.

Schedule.	1907.	1906.	1905.	1904.	1903.	1902.	1901.	1900.	1899.	1898.
RECEIPTS.										
Balance from the previous year	$ 809,946	$ 743,074	$ 751,708	$ 725,947	$ 723,041	$ 678,905	$ 574,557	$ 502,223	$ 539,813	$ 541,624
Ordinary municipal revenue:										
Municipal and school taxes	6,696,218	6,459,742	5,939,729	5,567,974	5,297,520	4,983,382	4,943,362	4,812,372	4,675,154	4,462,288
Licenses (liquor and other)	38,596	44,547	38,419	40,843	45,248	42,194	47,507	41,736	41,878	43,019
Fees, rents, fines, etc.	16,368	13,249	14,265	14,652	10,741	14,848	14,601	14,265	13,811	12,716
Refund of loans, investments and deposits	194,291	273,899	280,071	272,523	219,361	152,856	121,817	207,790	164,532	505,476
Interest and dividends	65,439	60,080	63,538	61,317	61,927	57,794	55,847	55,170	55,332	75,461
Loans:										
Money borrowed for current expenses	1,314,499	1,049,985	901,851	910,303	699,904	598,030	640,063	542,259	514,505	456,217
Money borrowed on debentures for—										
Schools	232,340	80,104	106,320	118,239	79,673	79,296	81,459	57,886	69,572	69,597
Drainage	357,191	397,494	428,621	355,049	305,589	199,541	251,639	227,323	229,131	261,022
Other purposes	100,829	69,067	108,819	136,504	27,773	73,687	41,448	31,200	59,975	48,438
Premiums on debentures sold	2,860	3,570	7,433	4,031	6,354	5,578	3,841	5,406	6,966	7,690
Grants from county for roads, etc.	58,125	19,648	31,088	19,059	18,941	17,916	17,877	16,814	15,337	15,895
Miscellaneous	183,080	146,214	170,823	133,769	148,561	106,211	108,529	79,874	106,081	123,393
Total	10,069,782	9,360,673	8,843,585	8,360,210	7,644,633	7,010,238	6,902,547	6,594,318	6,492,087	6,622,836
DISBURSEMENTS.										
Expenses of Municipal Government:										
Allowances, salaries and commissions	366,483	355,340	349,263	335,165	323,391	316,203	310,451	309,162	300,387	294,313
Law costs, including salaries	67,745	65,414	59,225	55,538	40,916	55,095	58,316	49,098	43,372	43,690
Other expenses of municipal gover't	131,180	121,243	114,919	114,212	109,842	102,842	97,903	99,468	105,323	96,166
Construction works:										
Roads and bridges	1,593,060	1,432,122	1,406,018	1,383,143	1,191,534	963,577	962,400	894,104	881,068	772,947
Buildings and other works	39,203	38,159	34,636	60,571	17,805	23,256	18,177	15,844	19,896	15,381
Drainage works	568,411	578,527	579,732	517,172	350,090	219,891	312,305	284,553	327,578	311,311
Support of the poor and other charities	54,655	51,779	53,345	54,157	52,777	55,565	54,948	54,417	55,943	59,871
County treasurer for levy	1,247,213	1,312,185	1,147,378	1,006,880	986,269	944,223	937,934	953,191	976,863	910,094

NOTE.—As the municipality of Keewatin became a town in 1908, its financial statistics for 1907 have been transferred from this Table to the Table for Villages and Towns.

Payments on schools and education	3,007,191	2,619,450	2,460,878	2,362,041	2,220,707	2,119,463	2,071,590	1,984,747	1,960,373	1,926,978
Sinking Fund investments and deposits	37,779	41,215	37,759	48,616	69,669	92,509	29,842	79,947	69,128	114,112
Other investments and special deposits	154,075	168,993	221,454	229,695	206,278	78,025	144,171	80,341	72,897	121,068
Loans repaid:										
Debentures redeemed (principal)—										
School	79,783	78,098	69,081	74,118	70,942	67,138	59,378	67,215	63,834	60,969
Drainage	306,050	264,886	241,965	230,195	207,202	221,222	210,673	211,999	196,409	194,044
All other	73,000	75,748	117,839	58,377	58,935	55,268	55,798	99,006	131,549	390,029
Interest on loans, advances, debent's	194,865	180,873	171,237	151,995	143,053	144,829	139,604	143,441	145,803	177,617
Moneys borrowed for current expenses	1,253,146	1,011,986	881,259	756,883	695,141	628,856	585,982	558,236	498,661	430,588
Board of Health (including salaries)	40,519	38,125	30,904	36,228	62,243	65,836	46,860	24,378	25,391	17,979
Miscellaneous	152,926	116,584	123,619	133,516	111,892	133,399	127,310	110,614	115,389	145,866
Totals	9,367,284	8,550,727	8,100,511	7,608,502	6,918,686	6,287,197	6,223,642	6,019,761	5,989,864	6,083,023
ASSETS.										
Cash in treasury	702,498	809,946	743,074	751,708	725,947	723 041	678,905	574,557	502,223	539,813
Taxes in arrears	1,628,496	1,494,402	1,489,899	1,415,301	1,312,290	1,278,210	1,191,743	1,285,700	1,383,475	1,438,023
Sinking Fund investments and deposits	191,902	197,905	241,122	517,153	522,675	385,028	182,381	234,632	233,255	213,767
Other investments and special deposits	*1,029,384	1,026,544	1,047,068	792,485	788,371	881,224	1,080,904	979,676	1,028,667	1,078,088
Land, buildings, and other property	599,815	593,890	547,885	523,948	483,497	465,572	438,951	429,001	409,171	414,704
Miscellaneous	1,441,403	1,270,597	1,215,211	1,137,925	994,865	1,013,723	1,093,559	918,667	892,919	619,615
Totals	5,593,498	5,393,284	5,284,259	5,138,520	4,827,645	4,746,798	4,666,443	4,422,233	4,449,710	4,304,010
LIABILITIES.										
County levy	370,704	329,742	431,779	444,802	388,561	369,977	372,468	380,823	413,738	428,262
Local school rates	389,039	355,748	289,265	293,966	300,001	283,875	271,587	278,484	281,551	299,667
Debentures outstanding (principal) for—										
Aid to railways	324,248	354,229	381,163	433,437	433,090	449,291	500,384	509,475	584,608	621,053
Schools	*731,277	582,722	580,716	543,285	499,164	490,433	481,026	458,945	468,180	462,438
Drainage	1,985,009	1,937,844	1,804,809	1,617,727	1,492,873	1,392,053	1,414,042	1,370,076	1,355,452	1,322,734
Other purposes	*451,969	400,866	380,613	340,380	262,600	279,624	207,412	215,671	208,344	243,473
Due Sinking Funds	11,757	36,936	41,820	26,420	34,110	33,618	13,063	15,143	14,515	20,171
Loans for current expenses and interest	*609,874	518,636	453,183	447,522	290,100	291,076	343,873	288,931	303,855	281,720
Miscellaneous	258,743	275,958	276,065	254,460	269,631	187,110	189,255	199,947	179,821	208,091
Totals	5,132,620	4,792,681	4,639,413	4,401,999	3,970,130	3,777,057	3,793,110	3,717,495	3,810,064	3,888,209

* Changes in these items not otherwise accounted for are due to amendments of previous returns, and are as follows:—*Other Investments* (Assets) decrease of $726 in Ramsay township, decline in value of bank stock. *Loans for Current expenses* (Liabilities) increase of $2,267 in Bucke township, and of $599 in Clarendon township. *Debentures* (Liabilities) increase of $100 in Carden township school debentures, and a decrease of $14,755 of which $4,102 is for school debentures due to transferring Keewatin to Villages and towns.

FINANCIAL STATEMENT—VILLAGE AND TOWN MUNICIPALITIES.

Summary showing the Totals for all Villages and Towns in Ontario, of the several items of Receipts, Disbursements, Assets and Liabilities for the Years ending December 31st, 1898-1907.

Schedule.	1907.	1906.	1905.	1904.	1903.	1902.	1901.	1900.	1899.	1898.
RECEIPTS.	$	$	$	$	$	$	$	$	$	$
Balance from previous year	419,925	300,811	291,810	317,169	288,047	299,611	359,702	331,695	264,194	237,842
Ordinary Municipal revenue:										
Municipal and School taxes	4,129,719	3,872,512	3,503,298	3,195,221	3,098,359	2,808,365	2,642,910	2,517,770	2,443,989	2,368,408
Licenses (liquor and other)	164,333	163,698	138,131	129,786	134,677	128,287	133,539	111,054	123,412	120,842
Fees, rents, fines, etc.	113,069	90,276	83,607	77,736	78,736	73,154	67,783	65,717	63,372	57,568
Water rates, etc.	1,022,235	893,113	773,240	651,195	567,407	446,571	363,507	308,217	270,143	208,384
Refund of loans and special deposits	427,243	427,119	341,140	307,649	258,031	229,800	174,558	172,156	196,518	174,726
Interest and dividends	113,874	103,728	101,606	75,691	67,722	56,800	59,669	56,086	56,736	34,488
Loans for current expenses	4,437,926	3,752,680	3,716,289	3,728,411	2,976,053	2,480,027	2,833,212	2,606,269	1,945,009	1,782,741
Money borrowed on debentures for Schools	90,359	280,566	311,420	138,800	33,282	70,572	39,513	45,456	70,533	36,350
Other purposes	1,744,005	1,638,928	2,090,715	1,709,570	1,636,159	1,343,527	1,291,157	1,274,909	1,316,533	856,009
Premium on debentures sold	3,704	16,923	23,451	10,757	6,906	10,815	13,426	11,042	41,986	30,945
County grants	19,614	8,948	6,273	4,529	5,641	5,891	5,009	966	2,099	4,357
Miscellaneous	199,204	218,124	140,147	152,716	166,231	117,708	79,000	78,602	67,223	54,455
Totals	12,885,210	11,767,426	11,521,127	10,499,230	9,317,251	8,071,128	8,062,985	7,579,939	6,861,747	5,967,115
DISBURSEMENTS.										
Expenses of Municipal Government										
Allowances, salaries and commissions	223,374	203,080	199,361	188,090	174,633	169,618	157,964	146,239	144,770	137,539
Street lighting, water supply, fire protection	917,574	884,388	846,221	790,284	647,841	557,114	486,372	459,283	415,070	349,382
Law costs (including salaries)	51,818	44,669	42,807	48,086	33,020	31,327	34,819	42,671	35,006	36,247
Other expenses of government	320,473	193,134	140,144	126,540	119,439	111,579	111,779	104,948	105,694	94,654
Construction works:										
Streets, bridges and parks	1,131,981	1,113,630	881,674	968,204	857,303	712,341	669,017	744,918	594,363	431,376
Buildings and other property	209,420	99,325	154,270	103,213	142,996	124,343	86,139	37,309	50,551	84,019
Water and electric light works	1,008,884	1,074,529	1,163,380	1,165,233	870,806	666,132	727,344	664,433	532,030	387,836
Support of the poor and other charities	41,675	40,759	42,210	41,938	34,314	34,162	36,631	43,305	34,914	36,859
Administration of justice, police services	129,641	117,981	102,002	100,755	93,843	84,943	78,185	74,730	73,618	77,176
County Treasurer for levy	211,415	210,813	176,658	156,737	149,912	137,537	134,095	128,825	127,467	126,557
Payments for schools and education	1,391,317	1,436,245	1,314,119	1,086,523	971,660	889,132	868,627	842,758	847,143	802,345

Sinking Fund investments and deposits	249,624	268,848	170,200	195,909	218,759	195,399	173,758	122,368	148,368	136,467
Other investments and special deposits	514,074	468,093	424,051	327,449	337,360	152,065	210,650	201,408	147,006	125,143
Debentures redeemed—Schools	101,237	83,619	56,713	66,713	69,423	53,244	49,940	64,022	70,102	65,626
All others	729,696	655,626	588,310	509,243	434,274	349,463	394,379	405,999	583,383	407,931
Interest on loans and debentures	962,635	888,420	804,426	727,453	689,203	601,165	579,747	538,707	480,276	488,933
Money borrowed for current expenses	3,988,368	3,311,631	3,855,425	3,283,070	2,776,346	2,519,543	2,631,189	2,313,200	1,930,941	1,753,970
Board of Health	48,759	36,164	31,214	28,866	47,682	51,952	40,665	17,568	17,055	12,146
Miscellaneous	294,329	216,547	227,101	293,114	331,268	342,022	292,074	267,546	192,295	148,715
Totals	12,526,297	11,347,501	11,220,316	10,207,420	9,000,082	7,783,081	7,763,374	7,220,237	6,530,052	5,702,921
ASSETS.										
Cash in Treasury	358,913	419,925	300,811	291,810	317,169	288,047	299,611	359,702	331,695	264,194
Taxes in arrears	1,052,089	957,257	973,603	857,757	755,891	771,265	750,907	699,422	742,632	819,301
Sinking Fund investments and deposits	*1,307,003	1,229,404	1,117,564	1,063,368	965,171	901,521	827,305	699,649	639,462	678,035
Other investments and special deposits	*1,922,757	1,669,161	1,501,201	1,294,692	1,179,305	926,020	874,087	796,182	729,902	604,170
Waterworks and electric light plant	9,044,064	8,165,519	7,560,705	6,969,554	6,190,912	5,325,118	4,957,483	4,350,455	3,821,922	3,377,206
Other buildings and property	4,846,241	4,304,891	3,990,462	3,705,070	3,627,032	3,548,881	3,383,249	3,284,979	3,166,971	3,078,588
Miscellaneous	2,557,117	2,184,795	2,060,715	1,744,008	1,343,310	1,214,067	1,141,173	1,035,123	721,470	534,646
Totals	21,088,184	18,930,952	17,505,061	15,926,259	14,378,790	12,974,919	12,233,815	11,225,512	10,154,054	9,356,140
LIABILITIES.										
County levy	49,643	41,010	63,969	70,963	55,789	52,257	52,551	56,565	53,227	50,573
Local school rates	324,992	262,566	277,625	260,361	268,622	269,035	242,196	235,247	218,770	237,063
Debentures outstanding for—										
Aid to railways	*419,941	431,198	453,974	489,310	534,302	456,746	497,282	525,038	508,231	530,634
Schools	*1,447,419	1,454,195	1,257,248	1,002,341	930,178	966,319	948,991	959,418	974,054	969,891
Other purposes	*17,165,700	16,128,969	15,120,657	13,580,590	12,324,271	11,201,290	10,166,590	9,243,319	8,395,146	7,645,019
Due Sinking Funds	49,651	57,157	31,484	34,162	36,127	35,420	34,021	38,779	37,745	43,032
Loans for current expenses and interest	2,534,219	2,065,166	1,628,245	1,765,282	1,317,168	1,115,820	1,155,695	952,373	658,143	638,317
Miscellaneous	482,610	362,399	280,117	264,294	191,470	203,109	225,392	199,154	183,629	148,481
Totals	22,474,175	20,802,660	19,113,319	17,467,303	15,657,927	14,299,996	13,322,721	12,209,893	11,028,945	10,268,010
No. of Towns and Villages	257	249	246	244	240	236	235	232	231	236

This comparative summary is for the towns and villages as at present organized. The statistics of those cities which were towns in the earlier years have been transferred to the comparative table for the nineteen cities. Previous to incorporation most of the towns and villages formed portions of township municipalities. It is impossible to transfer statistics as in the case of the cities, so that in this summary we have 236 towns and villages in 1898, increased to 257 in 1907.

* The following changes not otherwise noted, have been made in these assets and liabilities for 1907 :—Other investments (assets) decrease of $5,000 in Madoc Village, transferred to electric light plant, and $260 decrease in Belle River Village, written off mortgage. *Loans for Current Expenses* (Liabilities), increase of $2,200 in Thessalon town, and of $184 transferred from former Township of Keewatin. *Debentures* (Liabilities), increase of $492 in Burk's Falls village, and of $14,775 due to transference of Keewatin from township to towns and villages, of which $4,102 were for outstanding school debentures.

FINANCIAL STATEMENT—ONTARIO

Summary Statement showing for all Municipalities in Ontario (including counties, townships, and Liabilities for the ten years

Schedule.		1907.	1906.	1905.
RECEIPTS.		$	$	$
Balance from previous year	a	1,933,597	1,794,358	1,783,091
Ordinary municipal revenue:				
Municipal and school taxes	b	19,248,515	18,170,927	16,528,555
Licenses (liquor and other)	a	562,677	563,090	367,774
Fees, rents, tolls, fines, etc	a	1,202,444	1,068,783	1,010,352
Water rates, electric light or gas rates, etc	c	3,179,449	2,723,002	2,396,917
Surplus fees from Registrar	d	24,990	22,283	18,572
Rates from local municipalities	d	1,459,209	1,529,950	1,320,461
Subsidies and refunds:				
Received from Legislature on account of—				
Schools	d	387,576	198,212	142,464
Administration of justice	d	157,122	185,966	161,477
Refund of loans, investments and special deposits	a	5,173,184	4,434,072	2,869,165
Interest and dividends	a	783,743	638,418	628,587
Loans:				
Money borrowed for current expenses	a	12,305,443	10,131,946	8,871,179
Money borrowed on debentures (face value) for—				
School purposes	a	1,401,985	717,607	601,999
Other purposes	a	7,687,853	6,762,526	6,888,250
Non-resident taxes collected	d	37,280	37,839	33,589
Towns or cities separated from counties	d	73,220	80,255	64,159
Miscellaneous	a	1,261,779	1,376,761	1,070,824
Totals		56,880,066	50,435,995	44,757,415
DISBURSEMENTS.				
Expenses of municipal government:				
Attendance at meetings of council and committees	d	66,098	54,203	48,526
Allowances, salaries and commissions	a	1,034,329	998,358	829,516
Lighting of streets, water supply, fire protection	c	2,611,719	2,467,053	2,312,618
Law costs (including salaries)	a	222,529	195,103	187,117
Other expenses of municipal government	a	1,357,676	1,157,986	873,600
Construction works:				
Roads, bridges, streets and parks	a	7,423,690	6,293,307	5,461,136
Grants to minor municipalities for roads	d	140,640	92,960	80,045
Water and electric light works	c	2,728,490	2,673,152	2,904,694
Buildings and other works	a	1,332,387	998,319	903,022
Drainage works	e	568,411	578,527	579,732
Administration of justice, gaols, police, etc	f	1,481,408	1,416,958	1,322,055
Support of the poor and other charities	a	640,512	693,369	511,583
County treasurer for levy	a	1,458,628	1,522,998	1,324,036
Payments on account of schools and education	a	7,967,449	6,652,508	6,211,424
Sinking Fund investments and deposits	a	5,094,353	4,358,643	3,023,711
Other investments and special deposits	a	2,339,999	2,001,785	1,209,864

MUNICIPALITIES, FOR THE YEAR 1907.

cities, towns, and villages), the total of the several items of Receipts, Disbursements, Assets ending December 31st, 1898-1907.

1904.	1903.	1902.	1901.	1900.	1899.	1898.
$	$	$	$	$	$	$
1,736,751	2,046,125	1,578,195	1,413,467	1,645,145	1,849,739	1,641,559
15,544,148	14,939,761	14,297,780	13,644,383	13,203,140	12,669,127	12,217,687
358,243	375,233	347,740	356,352	322,151	338,142	331,603
854,759	755,232	728,062	683,629	575,683	533,076	501,409
2,019,763	1,866,174	1,688,811	1,444,789	1,349,986	1,401,458	1,289,755
16,795	17,929	14,520	12,614	16,131	11,716	10,957
1,180,799	1,115,242	1,114,766	1,060,743	1,099,357	1,110,356	1,047,924
138,341	185,600	137,792	144,370	142,954	149,361	147,418
168,108	90,283	140,288	122,330	147,437	144,228	146,726
5,014,690	2,156,043	2,186,385	2,257,041	1,444,024	2,695,613	2,451,302
617,958	525,450	548,181	502,929	514,873	500,273	493,578
9,072,489	8,241,547	7,085,441	6,260,577	6,807,547	5,525,298	5,205,349
509,618	230,055	497,068	173,272	165,842	156,105	338,993
7,374,796	4,548,817	3,261,285	4,442,646	3,031,113	4,079,658	4,267,653
28,120	32,525	34,604	36,861	42,540	55,524	73,120
74,557	68,729	93,019	90,186	89,910	81,535	79,175
1,029,301	887,306	739,626	677,752	458,722	567,932	677,370
45,739,236	38,082,051	34,493,563	33,323,941	31,056,555	31,869,141	30,921,578
54,358	47,504	42,768	41,407	39,616	44,548	38,934
873,859	838,869	817,406	794,462	773,736	772,441	709,169
2,305,688	2,077,426	1,855,821	1,709,301	1,623,999	1,449,992	1,490,253
202,028	137,526	161,833	165,563	157,984	137,986	149,569
607,112	607,458	482,473	597,345	529,808	503,775	467,339
5,271,546	4,613,946	3,823,574	3,564,315	3,741,106	3,325,856	2,657,522
132,130	105,007	23,657	19,873	23,329	20,620	18,252
2,309,910	1,607,030	1,318,909	1,171,264	1,358,820	1,195,405	812,117
629,052	633,277	627,171	368,549	334,133	529,596	713,208
517,172	350,090	219,891	312,305	284,553	327,578	311,311
1,262,586	1,202,552	1,143,062	1,157,413	1,084,909	1,072,526	1,066,013
473,614	446,204	418,343	400,945	405,953	381,554	365,071
1,163,617	1,139,361	1,083,203	1,073,442	1,083,298	1,105,537	1,043,123
5,526,701	5,188,486	4,937,354	4,685,150	4,694,876	4,380,777	4,434,194
4,246,798	2,329,689	2,046,632	1,963,474	1,266,082	2,675,969	2,473,950
1,017,906	1,296,803	611,050	757,113	753,507	501,007	436,681

FINANCIAL STATEMENT—ONTARIO

Summary Statement showing for all Municipalities in Ontario (including counties, townships, and Liabilities for the ten years

Schedule.		1907.	1906.	1905.
		$	$	$
Loans repaid :				
Debentures redeemed (principal)—				
School	*b*	291,585	195,755	176,562
All other	*a*	2,717,274	3,014,307	1,917,880
Interest on loans, advances and debentures	*a*	3,638,170	3,253,246	3,115,762
Refund of money borrowed for current expenses	*a*	10,243,615	8,738,266	8,759,211
Non-resident taxes paid	*d*	34,120	37,493	30,889
Board of Health (including salaries)	*b*	295,197	243,454	202,187
Miscellaneous	*a*	1,331,868	864,648	877,887
Totals		55,020,147	48,502,398	42,963,057
ASSETS.				
Cash in treasury (exclusive of Sinking Funds)	*a*	1,859,919	1,933,597	1,794,358
Taxes in arrears	*b*	4,475,980	4,106,898	4,102,479
Rates due from local municipalities	*d*	550,244	438,060	579,976
Sinking Fund investments and deposits	*a*	15,768,040	14,281,901	13,336,823
Other investments and special deposits	*a*	6,216,163	5,376,207	4,430,001
Waterworks and electric light plant	*c*	26,997,734	24,701,688	22,752,069
†Other buildings and property	*a*	27,457,129	25,976,658	24,765,171
Miscellaneous	*a*	14,204,551	12,270,710	11,002,097
Totals		97,529,760	89,085,719	82,762,974
LIABILITIES.				
County levy	*g*	420,347	370,752	495,748
School rates and grants unpaid	*a*	790,269	686,254	611,098
Debentures outstanding (principal) for—				
Aid to railways	*a*	3,573,127	3,631,283	3,712,231
Schools	*b*	6,959,974	5,849,474	5,327,622
All other purposes	*a*	73,447,083	68,417,566	64,550,738
Loans for current expenses and interest due on same	*a*	8,738,714	6,591,242	4,917,791
Local municipalities for non-resident taxes	*d*	12,073	8,913	8,567
Miscellaneous	*a*	5,759,941	4,908,988	4,638,783
Totals		99,701,528	90,464,472	84,262,578

† Exclusive of school property.

MUNICIPALITIES, FOR THE YEAR 1907.—*Concluded.*

cities, towns, and villages), the total of the several items of Receipts, Disbursements, Assets ending December 31st, 1898-1907.—*Concluded.*

1904.	1903.	1902.	1901.	1900.	1899.	1998.
$	$	$	$	$	$	$
185,372	179,700	208,271	166,868	181,157	163,722	216,858
3,441,882	1,850,123	1,873,592	2,123,937	2,231,993	2,188,816	3,463,746
2,961,166	2,784,757	2,762,612	2,709,953	2,652,749	2,508,955	2,633,762
9,435,267	7,677,580	6,596,080	6,660,448	5,429,438	6,057,300	4,689,474
28,790	46,584	34,835	40,847	42,272	70,386	66,343
201,976	214,381	238,717	198,002	128,250	118,111	100,750
1,108,615	970,947	1,120,184	1,063,770	821,020	691,539	714,200
43,956,145	36,345,300	32,447,438	31,745,746	29,643,088	30,223,996	29,071,839
1,783,091	1,736,751	2,046,125	1,578,195	1,413,467	1,645,145	1,849,739
3,943,057	3,829,618	3,916,407	4,159,807	4,252,611	4,329,972	4,614,387
579,103	527,890	482,437	610,246	489,635	533,868	531,222
12,516,290	12,099,680	11,044,846	10,442,683	10,104,879	9,821,918	9,395,774
3,883,220	4,070,337	3,698,117	3,835,209	3,741,275	3,593,175	3,557,079
21,106,360	18,981,162	17,804,397	16,995,522	16,203,624	15,312,773	16,085,883
23,798,114	22,896,172	22,674,469	22,139,669	21,986,563	21,600,123	19,974,122
9,519,195	9,293,238	8,232,626	7,472,707	7,004,484	6,584,596	5,918,589
77,128,430	73,434,848	69,899,424	67,234,038	65,196,538	63,421,570	61,926,795
515,765	444,350	422,234	425,019	437,388	466,965	478,835
597,570	609,447	590,801	541,491	565,055	536,240	589,389
3,674,259	3,733,760	3,697,804	3,740,675	3,689,546	3,837,041	3,944,744
4,901,793	4,577,471	4,527,116	4,241,070	4,169,382	4,180,673	4,194,554
59,619,723	55,616,308	52,954,548	51,514,905	49,313,874	48,371,889	46,367,074
4,820,258	5,178,828	4,670,123	4,190,162	4,602,864	3,191,709	3,720,632
5,867	6,537	20,192	7,308	11,295	11,027	25,889
3,570,472	2,287,331	2,057,522	2,059,801	2,151,431	2,096,325	2,068,990
77,705,707	72,454,032	68,940,340	66,720,431	64,940,835	62,691,869	61,390,107

(a) All municipalities; (b) townships, cities, towns and villages; (c) cities, towns and villages (d) counties; (e) townships; (f) counties, cities, towns and villages; (g) townships, towns and villages.

POPULATION, ASSESSMENT AND TAXATION.

Summary statement for the Province of Ontario, of the Population, as shown by the assessment rolls, and of the assessed values and amount of Taxes imposed, as shown by the collection rolls, together with the average rate of taxes per head of population assessed as resident, and rate in mills on the dollar of total assessed value for the ten years, 1899 to 1908, classified as *rural* (townships), *urban* (towns and incorporated villages) and *cities*.

Municipalities.	No. Organized.	Population.	Assessed Values.				Taxes imposed for all purposes.		
			Real Property.	Business Assessment.	Taxable Income.	Total.	Total.	Per head.	Mills on $
1908.			$	$	$	$	$	$ c.	
Rural	532	1,047,016	592,945,755	4,545,214	4,267,353	601,758,322	7,001,102	6 69	11.63
Urban	260	510,462	164,702,289	17,778,335	5,379,220	187,859,844	4,466,634	8 75	23.78
Cities	19	686,812	353,081,698	44,187,974	15,909,157	413,178,829	9,511,348	13 85	23.02
Total	811	2,244,290	1,110,729,742	66,511,523	25,555,730	1,202,796,995	20,979,084	9 35	17.44
1907.									
Rural	528	1,044,458	587,270,564	4,516,285	2,807,996	594,594,845	6,809,382	6 52	11.45
Urban	255	496,129	155,374,856	17,380,937	4,658,566	177,414,359	4,182,873	8 43	23.58
Cities	19	659,776	322,644,819	40,276,328	14,049,761	376,970,908	8,537,003	12 94	22.65
Total	802	2,200,363	1,065,290,239	62,173,550	21,516,323	1,148,980,112	19,529,258	8 88	17.00
1906.									
Rural	526	1,050,735	581,969,656	4,877,833	1,378,261	588,225,750	6,390,362	6 08	10.86
Urban	248	474,277	146,925,841	17,468,689	4,500,540	168,895,070	3,850,428	8 12	22.80
Cities	19	617,734	294,690,245	37,147,796	14,545,827	346,383,868	7,780,638	12 60	22.46
Total	793	2,142,746	1,023,585,742	59,494,318	20,424,628	1,103,504,688	18,021,428	8 41	16.33
1905.									
Rural	520	1,058,379	565,625,864	4,494,627	1,036,491	571,156,982	5,967,495	5 64	10.45
Urban	245	457,352	139,849,473	15,160,894	3,830,022	158,840,389	3,555,888	7 77	22.39
Cities	19	585,529	272,773,988	26,367,056	7,771,715	306,912,759	7,066,139	12 07	23.02
Total	784	2,101,260	978,249,325	46,022,577	12,638,228	1,036,910,130	16,589,522	7 90	16.0
1904.									
Rural	518	1,066,346	477,209,517	2,324,830	259,315	479,793,662	5,617,682	5 27	11.71
Urban	243	449,076	123,269,763	10,305,761	1,577,489	135,153,013	3,254,982	7 25	24.08
Cities	19	561,548	259,210,369	24,741,008	7,207,607	291,158,984	6,681,286	11 90	22.95
Total	780	2,076,970	859,689,649	37,371,599	9,044,411	906,105,659	15,553,950	7 49	17.17

1903.									
Rural	509	1,075,924	475,302,111	2,237,536	305,153	477,844,800	5,326,380	4 95	11.15
Urban	239	438,390	118,748,577	9,339,885	1,708,786	129,797,248	3,038,689	6 93	23.41
Cities	19	542,202	251,534,728	20,852,843	8,465,409	280,852,980	6,398,963	11 80	22.78
Total	767	2,056,516	845,585,416	32,430,264	10,479,348	888,495,028	14,764,032	7 18	16.62
1902.									
Rural	506	1,083,093	463,499,678	2,172,336	274,014	465,946,028	5,035,380	4 65	10.81
Urban	235	430,208	112,165,755	9,117,064	1,675,179	122,957,998	2,821,445	6 56	22.95
Cities	19	523,966	242,213,869	20,686,502	8,138,866	271,039,237	6,290,006	12 00	23.21
Total	760	2,037,267	817,879,302	31,975,902	10,088,059	859,943,263	14,146,831	6 94	16.45
1901.									
Rural	503	1,090,758	456,004,618	2,145,858	241,670	458,392,146	4,866,415	4 46	10.62
Urban	234	422,849	107,083,544	8,737,989	1,583,112	117,404,645	2,622,486	6 20	22 34
Cities	19	515,282	233,310,193	18,910,061	7,680,562	259,900,816	5,852,454	11 36	22.52
Total	756	2,028,889	796,398,355	29,793,908	9,505,344	835,697,607	13,341,355	6 58	15.96
1900.									
Rural	500	1,094,246	451,275,483	2,413,144	228,576	453,917,203	4,690,314	4 29	10.33
Urban	231	417,411	103,732,035	8,268,708	1,538,781	113,539,524	2,469,548	5 92	21.75
Cities	19	502,203	230,533,262	17,274,100	7,171,581	254,978,943	5,832,959	11 61	22.88
Total	750	2,013,860	785,540,780	27,955,952	8,938,938	822,435,670	12,992,821	6 45	15.80
1899.									
Rural	498	1,108,874	447,706,336	2,771,097	209,065	450,686,498	4,617,203	4 16	10.24
Urban	230	410,867	102,264,304	7,929,865	1,529,343	111,723,512	2,442,435	5 94	21.86
Cities	19	491,007	228,137,850	18,694,816	7,518,747	254,351,413	5,475,829	11 15	21.53
Total	747	2,010,748	778,108,490	29,395,778	9,257,155	816,761,423	12,535,467	6 23	15 35

1905 is the first year for business assessment. The figures for previous years are for personal property.

In 1908 the former township of Keewatin was organized as a town. In this case the statistics for previous years have in this table been transferred from "rural" to "urban" throughout. In like manner where villages were annexed to the cities the statistics were transferred from "urban" to "cities" for purposes of comparison. This has not been possible, however, where portions of townships became annexed to other municipalities.

POPULATION, AREA, ASSESSMENT, EXEMPTIONS AND TAXATION.

The following statement has been compiled from the returns from the Assessment and Collection Rolls of the Province of Ontario, for the year 1908.

Assessment.	Townships.	Towns and Villages.	Cities.	Total.
No. of Municipalities	532	260	19	811
Population assessed as resident	1,047,016	510,462	686,812	2,244,290
No. of acres assessed	*24,530,063	240,623	78,694	24,849,380
Value of real property (taxable and exempt):	$	$	$	$
(1) Exclusive of buildings	435,629,565	55,631,112	174,078,751	665,339,428
(2) Buildings	173,209,692	133,412,728	258,777,066	565,399,486
Total	608,839,257	189,043,840	432,855,817	1,230,738,914
Amount taxable for municipal and school rates:				
(1) Real property	591,747,250	160,701,793	347,057,971	1,099,507,014
(2) Business assessment	4,474,756	16,451,375	42,307,338	63,233,469
(3) Income	4,267,353	5,379,220	15,909,157	25,555,730
Amount liable for school rates *only*:				
(1) Real property	1,198,505	4,000,496	6,023,727	11,222,728
(2) Business assessment	70,458	1,326,960	1,880,636	3,278,054
Total assessment for school rates	601,758,322	187,859,844	413,178,829	1,202,796,995
Net assessment liable for municipal rates.	600,489,359	182,532,388	405,274,466	1,188,296,213
Real property exempt from taxation or liable for local improvements only.	15,893,502	24,341,551	79,774,119	120,009,172
Real property exempt from municipal rates	17,092,007	28,342,047	85,797,846	131,231,900
Ratio of real property exempt from municipal rates to total real property taxed for all purposes	Per cent. 2.89	Per cent. 17.64	Per cent. 24.72	Per cent. 11.94
Taxes levied for all school purposes	$ 2,833,295	$ 1,469,353	$ 2,671,577	$ 6,974,225
Taxes levied for municipal purposes, local improvement rates, dog taxes, statute labor commuted, etc.	4,167,807	2,997,281	6,839,771	14,004,859
Taxation per head of population... School	$ c. 2 71	$ c. 2 88	$ c. 3 89	$ c. 3 11
Taxation per head of population... Municipal	3 98	5 87	9 96	6 24

*Including 32,657 acres in Jaffray and Melick townships whose municipal organization was not reported to the Bureau when rural area was published, on page 25 of Part I., 1908.

STATISTICS

OF

ONTARIO MUNICIPALITIES

FINANCIAL STATEMENTS FOR 1907

POPULATION, ASSESSMENT AND TAXATION FOR 1908

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Township Municipalities and Counties in which located.	Receipts, 1907.						
	Balance from 1906.	Municipal and school taxes.	Licenses.	Fees, rents, fines, etc.	Interest and dividends.	Refund of money invested.	Borrowed for current expenses.
	$	$	$	$	$	$	$
1. Adelaide, Middlesex	8,352	15,304	80	.....	70	.....	2,000
2. Adjala, Simcoe	1,639	12,465	72	.....	.....	.....	2,092
3. Admaston, Renfrew	1,463	6,541	53	7	20	.....	.....
4. Adol,,hustown, Lennox & Add...	645	3,351	....	16	129	.....	800
5. Albemarle, Bruce	453	6,330	47	1	9	.....	950
6. Alberton, Rainy River	461	1,335	....	.....	.....	.....	.....
7. Albion, Peel	980	16,739	108	2	.....	.....	3,100
8. Aldborongh, Elgin	14 592	33,928	351	71	395	.....	11,502
9. Alfred, Prescott	714	8,661	324	58	.....	.....	600
10. Algona, S. Renfrew	135	2,015	....	17	.....	.....	.....
11. Alice and Fraser, Renfrew	12	5,213	31	...	.....	.....	... ...
12. Alnwick, Northumberland	294	4,264	72	14	.....	.....	800
13. Amabel, Bruce	4,197	12,541	....	7	53	.....	.....
14. Amaranth, Dufferin	386	14,961	....	8	71	.... ..	2,692
15. Ameliasburg, Prince Edward	.....	17,376	....	11	872	85	2,366
16. Amherst Island, Lennox & Add..	677	3,498	48	21	.....	.....	.....
17. Ancaster, Wentworth	1,263	20,984	108	54	1,288	11,024	.....
18. Anderdon, Essex	.....	14,104	79	.....	.....	.....	2,383
19. Anson and Hindon, Haliburton..	38	861	30	.....	.....	.....	.....
20. Armour, Parry Sound	1,266	3,817	2	.....	26	.....	.....
21. Arran, Bruce	3,161	13,469	72	.....	3	.....	994
22. Artemesia, Grey	4,025	19,553	....	11	87	61	2,818
23. Arthur, Wellington	1,041	19,164	50	.....	6	.....	4,500
24. Ashfield, Huron	4,001	16,218	200	5	65	.....	1,221
25. Asphodel, Peterborough	.....	14,166	....	22	.....	.....	5,441
26. Assiginack, Manitoulin	1,162	3,612	40	33	.....	.....	.....
27. Athol, Prince Edward	695	6,084	....	.....	52	40	377
28. Atwood and Curran, Rainy River.	1,543	1,655	....	15	35	.....	3,229
29. Augusta, Grenville	1,094	16,296	102	638	600	100	5,000
30. Bagot and Blithefield, Renfrew ..	208	3,902	158	6	.....	.....	.....
31. Balfour, Sudbury	921	3,256	5	77	.....	.....	2,200
32. Bangor W. & McClure, Hastings..	185	2,615	30	.....	.....	.....	56
33. Barrie, Frontenac	82	1,352	40	2	.....	.....	.....
34. Barton, Wentworth	4,500	19,379	195	556	117	3,574	.....
35. Bastard and Burgess S., Leeds...	884	13,737	115	9	465	.....	.....
36. Bathurst, Lanark	1,052	10,776	....	.....	41	.....	.....
37. Bayham, Elgin	5,451	23,570	248	42	67	.....	18,500
38. Beckwith, Lanark	1,165	9,184	53	.....	405	.....	.....
39. Bedford, Frontenac	343	7,090	30	6	.....	.....	.....
40. Belmont & Methuen, Peterborough	114	7,900	....	.....	6	.....	.....
41. Bentinck, Grey	4,621	12,020	96	12	86	.....	.....
42. Bertie, Welland	913	22,264	345	58	.....	.....	1,500
43. Beverly, Wentworth	2,440	21,120	135	45	663	5,170	.....
44. Bexley, Victoria	30	4,831	90	5	173	.....	.....
45. Biddulph, Middlesex	.....	14,185	135	.....	.....	.....	3,400
46. Billings, Manitoulin	281	1,286	18	1	.....	.....	300
47. Binbrook, Wentworth	13	9,233	....	.....	.....	.....	1,700
48. Blandford, Oxford	4,656	10,845	54	125	120	3,000	.....
49. Blanshard, Perth	5,747	18,771	....	.....	19	.....	6,685
50. Blenheim, Oxford	3,920	27,547	216	638	71	.....	7,917
51. Blezard, Sudbury	363	1,416	....	....	.....	.....	946
52. Bonfield, Nipissing	2,095	4,246	56	.....	.....	.....	.....
53. Bosanquet, Lambton	772	21,420	50	.....	4	.....	11,342

MUNICIPALITIES, FOR THE YEAR 1907.

ASSETS AND LIABILITIES, 1907.

Receipts, 1907.—*Continued.*							Disbursements, 1907.					
Borrowed on debentures for schools.	Borrowed on debentures for drainage.	Borrowed on debentures for other purposes.	Premiums on debentures sold.	County grants.	Miscellaneous.	Total receipts.	Allowances, salaries and commissions.	Law costs.	Other expenses of municipal government.	Roads and bridges.	Buildings and other works.	No.
$	$	$	$	$	$	$	$	$	$	$	$	
.....	.....	.....	....	698	202	26,706	740	35	249	3,022	.....	1
.....	.....	.....	.....	.....	.....	16,268	792	.....	220	2,633	.....	2
.....	.....	.....	....	.....	188	8,272	399	20	117	1,277	.....	3
.....	.....	.....	....	113	80	5,134	214	.....	90	367	.....	4
2,000	.....	.....	....	332	10	10.132	582	30	210	1,491	.....	5
.....	.....	.....	....	.....	15	1,811	323	9	36	380	.....	6
.....	.....	.....	....	.....	162	21,091	761	135	304	3,294	299	7
.....	2,965	1,373	....	.....	235	65,412	1,779	.....	1,105	8,109	.....	8
.....	.....	.....	....	100	157	10,614	505	4	184	2,082	44	9
.....	.....	.....	....	.....	86	2,253	233	.....	38	11	.....	10
.....	.....	.....	....	.....	128	5,384	297	.....	130	391	.....	11
.....	.....	.....	....	10	364	5,818	407	.....	143	1,350	.....	12
.....	.....	.....	....	460	363	17,621	786	28	315	1,852	.....	13
.....	1,246	.....	....	.....	.....	19,364	746	9	258	3,010	.....	14
.....	.....	.....	....	400	124	21,234	654	108	280	2,157	.....	15
.....	.....	.....	....	347	71	4,662	212	.....	42	858	.....	16
.....	.....	1,500	....	.....	248	36,469	1,228	37	585	7,184	.....	17
.....	794	4,328	14	1,000	603	23,305	550	195	346	9,903	.....	18
.....	.....	.....	....	.....	.....	929	161	.....	52	100	.....	19
.....	.....	.....	....	.....	90	5,201	423	61	78	1,098	.....	20
.....	.....	.....	....	.....	140	17.839	653	12	295	4,808	.....	21
.....	.....	3,000	16	.....	94	29,665	989	178	635	7,678	78	22
.....	.....	.....	....	.....	318	25,079	938	.....	216	2,978	.....	23
.....	.....	.....	....	21	102	21,833	804	14	410	2,054	.....	24
1,600	.....	.....	....	.....	72	21,301	646	77	261	4,497	.....	25
.....	.....	.....	....	.....	549	5,396	318	5	59	1,315	92	26
.....	.....	.....	....	.....	58	7,306	224	4	125	353	.....	27
.....	.....	3,830	....	.....	46	10,353	525	.....	115	2,165	....	28
.....	.....	.....	....	.....	20	23,850	1,002	238	374	4,835	.....	29
.....	.....	.....	....	128	112	4,514	318	.....	164	405	18	30
.....	.....	.....	....	.....	.....	6,459	515	15	80	674	.....	31
.....	.....	.....	....	359	99	3 344	265	.....	49	621	.....	32
.....	.....	.....	....	.....	55	1,531	226	.....	50	27	.....	33
4,100	.....	.....	....	.....	706	33.127	1,514	877	870	5,814	....	34
.....	.....	.....	....	.....	150	15,360	743	.....	269	1,577	.....	35
.....	.....	.....	....	.....	222	12,091	466	.....	226	503	.....	36
.....	.....	.....	....	245	802	48,925	1,023	51	533	6,569	.....	37
.....	.....	.....	....	.....	90	10,897	492	3	118	1,206	.....	38
.....	.....	.....	....	26	78	7,573	396	.....	105	379	.....	39
.....	.....	.....	....	.....	528	8,548	447	10	309	1,172	.....	40
.....	.....	.....	....	.....	81	16,916	592	931	219	3,886	.....	41
.....	.....	.....	....	.....	24	25,104	830	247	326	9,160	.....	42
.....	.....	1,133	....	.....	288	30.994	1,179	239	502	5,072	.....	43
.....	.....	.....	....	.....	1,170	6,299	321	103	126	609	.....	44
.....	.....	.....	....	1,658	203	19,581	704	248	290	5,301	.....	45
.....	.....	.....	....	.....	505	2,391	213	1	45	1,148	.....	46
.....	.....	.....	....	.....	152	11,098	520	.....	182	1,468	.....	47
.....	.....	.....	....	.....	448	19,264	613	24	202	2,245	.....	48
.....	.....	.....	....	4,492	1,721	37,435	1,117	40	255	11,373	200	49
2,700	.....	.....	....	222	347	43,578	1,447	34	520	6,984	.....	50
.....	.....	.....	....	.....	5	2,730	396	.....	67	385	.....	51
.....	.....	.....	....	.....	153	6,550	398	16	88	219	789	52
.....	1,803	.....	....	.....	14	35,405	828	83	384	5,252	.....	53

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Township Municipalities.	Disbursements, 1907.—*Continued.*						
	Board of Health.	Support of the poor and other charities.	County Treasurer for levies.	Payment on account of schools and education.	Drainage works.	Sinking Fund investments and deposits.	Other investments and deposits.
	$	$	$	$	$	$	$
1. Adelaide	40	4	5,136	5,795	290	.....	.....
2. Adjala	2	50	3,321	4,211	.....	.....	.....
3. Admaston	20	87	1,417	3,919	.....	.....	.....
4. Adolphustown	.....	107	1,524	1,742	.....	.....	800
5. Albemarle	192	82	824	4,704	394	85	.....
6. Alberton	.....	5	.....	635	.....	.....	.....
7. Albion	25	117	3,917	7,500	.....	.....	.....
8. Aldborough	688	112	4,733	10,922	1,918	2,199	.....
9. Alfred	29	28	1,572	4,906	473	.....	.....
10. Algona	13	.....	501	949	.....	.....	.....
11. Alice and Fraser	.....	150	789	3,365	.....	.....	.....
12. Alnwick	15	15	859	1,738	.....	.....	2
13. Amabel	374	104	1,588	5,069	381	.....	.....
14. Amaranth	15	20	.....	8,677	1,685	.....	.....
15. Ameliasburg	31	171	4,848	7,724	.....	832	.....
16. Amherst Island	.....	370	.....	2,073	.....	.....	.....
17. Ancaster	135	531	7,506	8,950	.....	.....	9,174
18. Anderdon	514	228	1,687	1,509	1,278	.....	.....
19. Anson and Hindon	.....	5	107	445	.....	.....	.....
20. Armour	16	10	.....	1,935	.....	.....	.....
21. Arran	136	5	3,220	6,080	.....	.....	.....
22. Artemesia	80	9	2,351	9,967	54	399	287
23. Arthur	79	170	6,007	8,771	.....	.....	.....
24. Ashfield	23	10	8,904	7,624	7	.....	.....
25. Asphodel	58	111	3,035	6,063	.....	.....	.....
26. Assiginack	12	34	.....	2,797	.....	.....	.....
27. Athol	7	12	2,070	2,731	.....	.....	54
28. Atwood and Curran	.....	16	.....	331	.....	.....	.....
29 Augusta	419	20	3,361	10,026	115	168	358
30. Bagot and Blithefield	28	43	437	2,182	.....	.....	400
31. Balfour	201	21	.....	2,597	67	.....	.....
32. Bangor W. and McClure	46	5	297	1,673	.....	.....	.....
33. Barrie	28	24	107	999	.....	.....	.....
34. Barton	401	485	3,835	11,961	.....	.....	3,956
35. Bastard and Burgess	205	21	2,356	8,560	.....	.....	.....
36. Bathurst	34	94	3,337	5,828	13	.....	.....
37. Bayham	16	54	4,302	9,915	194	.....	.....
38. Beckwith	18	27	2,593	4,535	.....	.....	.....
39. Bedford	.....	29	1,432	3,532	.....	.....	.....
40. Belmont & Methune	5	74	876	4,577	.....	.....	.....
41. Bentinck	21	13	2,734	6,280	.....	.....	.....
42. Bertie	66	46	3,440	6,285	1,041	.....	.....
43. Beverly	77	580	.....	8,942	.....	.....	4,782
44. Bexley	32	5	443	2,434	.....	933	.....
45. Biddulph	25	150	3,215	5,294	.....	.....	.....
46. Billings	.....	5	.....	671	.....	.....	.....
47. Binbrook	34	277	2,944	3,307	.....	.....	.....
48. Blandford	26	10	2,247	6,436	1,439	.....	.....
49. Blanshard	62	193	9,051	6,330	.....	.....	.....
50. Blenheim	44	52	5,656	15,053	1,019	.....	.....
51. Blezard	.....	.....	.....	700	46	.....	.....
52. Bonfield	14	85	.....	2,330	.....	.....	.....
53. Bosanquet	35	286	3,736	6,937	3,446	24	.....

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Disbursements, 1907.—*Continued.*								Assets on December 31, 1907			
School debentures redeemed.	Drainage debentures redeemed.	All other debentures redeemed.	Refund of moneys borrowed for current expenses.	Interest on loans, advances and debentures.	Discount on debentures sold.	Miscellaneous.	Total disbursements.	Cash in Treasury.	Taxes in arrears.	Sinking Fund investments and deposits.	No.
$	$	$	$	$	$	$	$	$	$	$	
.....	.....	.....	2,000	31	.....	48	17,390	9,316	15	.....	1
87	.....	.....	2,092	88	.....	252	13,748	2,520	690	.....	2
.....	.....	.....	.....	2	.....	43	7,301	971	2,849	.....	3
.....	.....	.....	.....	.....	.....	28	4,872	262	506	.....	4
.....	.....	.....	950	71	.....	230	9,845	287	1,418	396	5
100	.....	.....	.....	20	.....	3	1,511	300	647	.....	6
123	.....	.....	3,100	149	.....	469	20,193	898	.....	.....	7
.....	3,602	490	15,000	2,536	.....	1,020	54,213	11,199	11,458	15,719	8
.....	.....	.....	600	15	.....	126	10,568	46	6,655	.....	9
44	.....	.....	.....	11	.....	25	1,825	428	231	.....	10
.....	.....	.....	.....	.....	.....	38	5,160	224	1,201	.....	11
.....	.....	.....	800	18	.....	56	5,403	415	30	.....	12
326	.....	1,012	.....	772	.....	168	12,775	4,846	368	.....	13
.....	853	.....	2,692	243	.....	23	18,231	1,133	2,363	.....	14
300	.....	.....	3,169	821	.....	139	21,234	.....	2,277	14,431	15
.....	.....	.....	.....	.....	.....	78	3,633	1,029	2,479	.....	16
.....	.....	116	.....	75	.....	539	36,060	409	4,649	.....	17
.....	1,259	1,086	2,964	832	.....	403	22,754	551	9,563	.....	18
35	.....	.....	.....	4	.....	1	910	19	827	.....	19
.....	.....	.....	.....	.....	.....	7	3,628	1,573	2,042	.....	20
233	.....	.....	1,595	96	.....	65	17,198	641	.....	.....	21
391	.....	.....	2,500	407	.....	125	26,128	3,537	106	3,121	22
131	.....	.....	4,500	182	.....	254	24,226	853	117	.....	23
.....	.....	.....	1,221	50	.....	77	21,198	635	992	.....	24
127	.....	.....	5,601	219	.....	6	21,301	.....	78	.....	25
.....	.....	.....	.....	2	.....	48	4,682	714	187	.....	26
.....	.....	.....	377	7	.....	28	5,992	1,314	2	.....	27
32	.....	404	6,300	462	.....	3	10,353	.....	2,738	.....	28
.....	.....	.....	1,350	260	.....	352	22,878	972	6,938	1,704	29
.....	.....	.....	.....	.....	.....	24	4,019	495	1,328	.....	30
.....	.....	.....	1,700	73	.....	144	6,087	372	2,955	.....	31
227	.....	.....	.....	110	.....	51	3,344	.....	4,349	.....	32
.....	.....	.....	.....	.....	.....	.....	1,461	70	450	.....	33
1,000	.....	.....	.....	507	.....	205	31,425	1,702	2,235	14,151	34
.....	.....	.....	.....	27	.....	40	13,798	1,562	250	.....	35
.....	.....	.....	.....	.....	.....	57	10,558	1,533	144	.....	36
100	103	1,812	20,500	1,319	.....	562	47,053	1,872	5,837	.....	37
.....	.....	.....	.....	.....	.....	14	9,006	1,891	177	.....	38
164	.....	189	275	57	.....	65	6,623	950	566	.....	39
170	.....	.....	.....	102	.....	454	8,195	353	3,933	.....	40
103	.....	.....	.....	58	.....	9	14,846	2,070	3,071	.....	41
820	249	.....	1,500	222	.....	258	24,490	614	3,917	.....	42
.....	.....	.....	3,470	.....	.....	370	25,213	5,781	6,167	.....	43
.....	.....	.....	.....	350	.....	18	5,374	925	1,431	6,110	44
.....	.....	.....	3,518	63	.....	79	18,887	694	137	.....	45
.....	.....	.....	.....	.....	.....	23	2,106	285	701	.....	46
141	.....	.....	1,700	78	.....	92	10,743	355	205	.....	47
250	1,126	.....	.....	513	.....	6	15,137	4,117	269	.....	48
250	.....	.....	6,685	397	.....	357	36,310	1,125	337	.....	49
601	329	.....	7,917	484	.....	440	40,580	2,998	277	.....	50
.....	.....	.....	771	.....	.....	105	2,470	260	2,448	.....	51
245	.....	.....	.....	149	.....	17	4,350	2,200	944	.....	52
204	2,009	.....	11,342	513	.....	92	35,171	234	18	143	53

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Township Municipalities.	Assets on December 31, 1907.—*Continued.*			
	All other investments and deposits.	Other property.	Miscellaneous.	Total assets.
	$	$	$	$
1. Adelaide	.....	1,500	633	11,464
2. Adjala	.....	.....	830	4,040
3. Admaston	.....	750	.....	4,570
4. Adolphustown	3,800	750	.....	5,318
5. Albemarle	.....	300	2,821	5,222
6. Alberton	.....	.....	300	1,247
7. Albion	.....	1,100	2,203	4,201
8. Aldborough	400	2,600	26,432	67,808
9. Alfred	.....	2,500	200	9,401
10. Algona S	.....	.....	133	792
11. Alice and Fraser	.....	.....	.....	1,425
12. Alnwick	30	1,200	8	1,683
13. Amabel	.....	300	3,451	8,965
14. Amaranth	.....	1,000	392	4,888
15. Ameliasburg	25,805	5,700	354	48,567
16. Amherst Island	.....	700	.....	4,208
17. Ancaster	26,358	5,400	1,384	38,200
18. Anderdon	.....	1,000	369	11,483
19. Anson and Hindon	.....	.....	152	998
20. Armour	.....	250	.....	3,865
21. Arran	.....	800	1,590	3,031
22. Artemesia	287	1,030	8,288	16,369
23. Arthur	.....	1,200	1,124	3,294
24. Ashfield	.....	325	60	2,012
25. Asphodel	.....	3,200	1,473	4,751
26. Assiginack	.....	775	16	1,692
27. Athol	1,406	1,245	.....	3,967
28. Atwood and Curran	.....	.....	7,631	10,369
29. Augusta	17,875	2,500	.....	29,989
30. Bagot and Blithefield	400	1,000	.....	3,223
31. Balfour	.....	1,597	252	5,176
32. Bangor W. and McClure	.....	200	1,600	6,149
33. Barrie	.....	300	.....	820
34. Barton	2,626	2,235	14,900	37,849
35. Bastard and Burgess	12,050	2,500	5	16,367
36. Bathurst	.....	750	926	3,353
37. Bayham	.....	2,200	860	10,769
38. Beckwith	8,336	1,340	.....	11,744
39. Bedford	.....	500	297	2,313
40. Belmont & Methuen	.....	800	2,472	7,558
41. Bentinck	.....	.....	1,037	6,178
42. Bertie	.....	5,050	2,352	11,933
43. Beverly	13,591	3,500	.....	29,039
44. Bexley	.....	.....	427	8,893
45. Biddulph	.....	1,300	1,071	3,202
46. Billings	.....	250	.....	1,236
47. Binbrook	.....	500	149	1,209
48. Blandford	.....	250	3,331	7,967
49. Blanshard	.....	1,100	2,278	4,840
50. Blenheim	.....	1,175	6,388	10,838
51. Blezard	.....	.....	.....	2,708
52. Bonfield	.....	925	1,518	5,587
53. Bosanquet	.....	500	7,776	8,671

NOTE.—School property is not included in the assets, but under the head "Miscellaneous" are included advances on local improvements and school debentures outstanding.

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES. 1907.—*Continued.*

Liabilities on December 31, 1907.										
County levy.	Local school rates.	Railway debentures.	School debentures.	Drainage debentures.	All other debentures.	Loans for current expenses and interest.	Due Sinking Fund.	Miscellaneous.	Total liabilities.	No.
$	$	$	$	$	$	$	$	$	$	
5,551	.....	.....	.....	.....	.....	.....	.....	1,557	7,108	1
3,337	.....	.....	830	.....	.....	.....	.....	100	4,267	2
1,619	373	.....	.....	.....	.....	.....	.....	100	2,092	3
.....	.....	.....	.....	.....	.....	800	.....	.....	800	4
.....	60	.....	2,875	.....	.....	.....	.....	33	2,968	5
.....	.....	.....	300	.....	.....	.....	.....	20	320	6
.....	.....	.....	2,133	.....	.....	.....	.....	.....	2,133	7
6,961	.....	7,000	18,600	18,221	4,666	10,603	4,686	2,942	73,679	8
2,177	3,740	.....	.....	.....	.....	.....	.....	25	5,942	9
4	388	.....	133	.....	.....	.....	.....	20	545	10
902	.....	.....	.....	.....	.....	.....	.....	14	916	11
.....	.....	.....	.....	.....	.....	.....	.....	5	5	12
.....	.....	15,063	1,167	.....	1,156	.....	.....	.....	17,386	13
2,602	142	.....	.....	4,424	.....	.....	.....	560	7,728	14
.....	.....	.....	300	.....	15,000	2,366	.....	85	17,751	15
1,603	681	.....	.....	.....	.....	.....	.....	25	2,309	16
.....	.....	.....	.....	.....	†1,384	.....	.....	*1,583	2,967	17
1,687	2,975	.....	.....	5,473	5,927	2,411	.....	371	18,844	18
.....	656	.....	39	.....	.....	.....	.....	11	706	19
.....	1,797	.....	.....	.....	.....	.....	.....	844	2,641	20
.....	.....	.....	1,590	.....	.....	.....	.....	.....	1,590	21
.....	421	.....	8,235	.....	3,000	.....	318	444	12,418	22
.....	166	.....	1,124	.....	.....	.....	.....	59	1,349	23
.....	50	.....	.....	.....	.....	.....	.....	113	163	24
.....	.....	.....	1,473	.....	.....	60	.....	284	1,817	25
.....	.....	.....	.....	.....	.....	.....	.....	6	6	26
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27
.....	.....	.....	668	.....	6,968	480	.....	274	8,390	28
.....	.....	.....	.....	3,200	.....	6,050	.....	120	9,370	29
.....	7	.....	.....	.....	.....	.....	.....	110	117	30
.....	1,138	.....	.....	.....	.....	1,000	.....	.....	2,138	31
300	2,116	.....	1,600	.....	.....	.....	.....	472	4,488	32
88	100	.....	.....	.....	.....	.....	.....	63	251	33
.....	1,048	.....	14,900	.....	.....	.....	.....	950	16,898	34
.....	.....	.....	.....	.....	.....	.....	.....	300	300	35
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36
.....	63	18,150	.....	2,117	.....	6,000	.....	.....	26,330	37
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38
.....	98	.....	278	.....	.....	.....	.....	60	436	39
1,047	958	.....	2,254	.....	.....	.....	.....	145	4,404	40
.....	628	.....	1,037	.....	.....	.....	.....	138	1,803	41
.....	1,498	.....	.....	2,213	.....	.....	.....	1,471	5,182	42
8,665	.....	.....	.....	.....	1,133	.....	.....	160	9,958	43
.....	1,290	7,000	.....	.....	.....	.....	.....	50	8,340	44
.....	133	.....	.....	.....	.....	.....	.....	134	267	45
.....	321	.....	.....	.....	.....	300	.....	23	644	46
.....	.....	.....	149	.....	.....	.....	.....	.....	149	47
.....	.....	.....	2,750	8,697	.....	.....	.....	.....	11,447	48
.....	.....	.....	1,287	.....	.....	.....	.....	105	1,392	49
.....	.....	.....	6,388	3,128	.....	.....	.....	.....	9,516	50
.....	710	.....	.....	.....	.....	675	.....	.....	1,385	51
.....	1,240	.....	1,518	.....	.....	.....	.....	53	2,811	52
.....	.....	.....	279	6,209	.....	.....	.....	2,269	8,757	53

* Road Fund. † Local improvement in Ancaster Police village.

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Township Municipalities and Counties in which located.	Receipts, 1907. Balance from 1906.	Municipal and school taxes.	Licenses.	Fees, rents, fines, etc.	Interest and dividends.	Refund of money invested.	Borrowed for current expenses.
	$	$	$	$	$	$	$
54. Brant, Bruce	2,263	19,138	204	3	118	.....	2,500
55. Brantford, Brant	5,853	33,398	262	58	3,251	.....	.....
56. Brighton, Northumberland	.....	12,447	....	4	.....	.....	5,000
57. Brock, Ontario	666	21,882	116	300	.....	.....	10,690
58. Bromley, Renfrew	1,473	8,111	162	32	.....	.....	420
59. Brooke, Lambton	22	39,120	63	1	79	.....	8,113
60. Brougham, Renfrew	54	939	105	.....	.....	.....	.....
61. Bruce, Bruce	1,722	16,328	....	4	72	643	1,900
62. Brudenell & Lyndoch, Renfrew	312	3,276	53	.....	.....	.....	.....
63. Brunel, Muskoka	868	2,344	2	.....	51	.....	.....
64. Bucke, Nipissing	287	1,881	....	995	.....	.....	200
65. Burford, Brant	2,046	27,198	64	4	70	2,718	.....
66. Burgess N., Lanark	143	3,556	....	.....	.....	.....	.....
67. Burleigh & Anstruther, Peterboro	542	2,561	90	37	.....	.....	.....
68. Burpee, Manitoulin	334	967	....	.....	.....	.....	.....
69. Caistor, Lincoln	1,056	6,751	48	.....	.....	.....	400
70. Caldwell, Nipissing	1,205	5,310	20	.....	3	.....	900
71. Caledon, Peel	318	22,718	248	28	21	230	5,000
72. Caledonia, Prescott	73	8,991	189	.....	.....	.....	.....
73. Calvin, Nipissing	336	2,603	....	.....	.....	.....	.....
74. Cambridge, Russell	1,886	13,596	120	.....	.....	50	980
75. Camden, Kent	.....	16,022	....	50	.....	.....	5,465
76. Camden E., Lennox & Add	.....	25,514	280	3	6	.....	6,848
77. Cameron, Nipissing	12	420	....	.....	.....	.....	250
78. Canborough, Haldimand	811	4,949	48	.....	.....	.....	425
79. Caradoc, Middlesex	5,877	23,752	90	37	97	.....	.....
80. Carden, Victoria	41	3,349	....	.....	.....	50	.....
81. Cardiff, Haliburton	136	1,958	....	.....	.....	.....	.....
82. Cardwell, Muskoka	1,617	1,305	....	10	.....	.....	.....
83. Carling, Parry Sound	384	1,269	....	.....	.....	.....	200
84. Carlow, Hastings	413	3,178	....	.....	.....	.....	.....
85. Carnarvon, Manitoulin	787	2,543	36	.....	8	.....	30
86. Carrick, Bruce	2,406	19,900	357	3	314	.....	100
87. Cartwright, Durham	445	9,520	....	6	.....	.....	1,000
88. Cavan, Durham	288	18,338	....	.....	.....	.....	9,200
89. Cayuga, N., Haldimand	1,857	9,427	96	1	.....	.....	.....
90. Cayuga S., Haldimand	413	3,839	....	.....	.....	.....	.....
91. Chaffey, Muskoka	396	3,394	23	.....	.....	.....	155
92. Clandos, Peterborough	175	3,289	....	41	.....	.....	.....
93. Chapleau, Sudbury	13	4,031	207	15	.....	5	.....
94. Chapman, Parry Sound	1,222	3,037	45	.....	.....	.....	.....
95. Chapple, Rainy River	1,042	4,761	53	.....	21	.....	1,900
96. Charlottenburgh, Glengarry	2,454	28,201	338	5	18	.....	8,612
97. Charlotteville, Norfolk	.....	15,067	79	6	411	.....	1,294
98. Chatham, Kent	.....	50,304	...	25	551	.....	26,632
99. Chinguacousy, Peel	297	28,142	....	9	1,482	5,180	7,000
100. Christie, Parry Sound	1,032	1,926	84	.....	.....	.....	.....
101. Clarence, Russell	1,939	15,949	300	.....	.....	.....	6,000
102. Clarendon and Miller, Frontenac	537	2,108	2	.....	.....	.....	.....
103. Clarke, Durham	372	19,583	..	83	.....	.....	955
104. Clinton, Lincoln	477	15,316	50	.....	26	30	1,919
105. Cockburn Island, Manitoulin	110	1,677	....	.....	8	.....	.....
106. Colborne, Huron	2,324	10,728	100	.....	4	.....	4,500

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Receipts, 1907.—*Continued.*							Disbursements, 1907.					
Borrowed on debentures for schools.	Borrowed on debentures for drainage.	Borrowed on debentures for other purposes.	Premiums on debentures sold.	County grants.	Miscellaneous.	Total receipts.	Allowances, salaries and commissions.	Law costs.	Other expenses of municipal government.	Roads and bridges.	Buildings and other works.	No.
$	$	$	$	$	$	$	$	$	$	$	$	
.....	.....	.....	....	.....	166	24,392	903	138	240	5,425	.....	54
.....	.....	.....	....	.....	682	43,504	2,458	351	911	9,016	.....	55
.....	.....	.....	....	.....	225	17,676	614	64	190	3,075	.....	56
.....	.....	.....	....	.....	343	33,997	1,272	137	964	4,323	3,564	57
.....	.....	.....	....	.....	108	10,306	404	.....	112	616	.....	58
2,200	2,501	.....	3	.....	279	52,381	970	1,794	414	9,875	.....	59
.....	.....	.....	....	12	6	1,116	196	.....	47	65	15	60
.....	.....	.....	....	206	603	21,478	808	4	331	4,201	.....	61
.....	.....	.....	....	34	3	3,678	365	.....	53	92	.....	62
1,000	.....	.....	....	.....	.....	4,265	317	.....	67	453	.....	63
.....	.....	.....	....	.....	279	3,642	562	1,013	63	387	.....	64
.....	1,374	.....	...	.....	406	33,880	1,136	120	473	9,502	.....	65
.....	.....	.....	....	.....	98	3,797	224	.....	66	242	.....	66
.....	.....	.....	....	.....	453	3,683	296	3	132	231	.....	67
.....	.....	.....	....	.....	.....	1,301	114	4	31	9	.....	68
.....	.....	.....	....	.....	120	8,375	372	.....	298	863	.....	69
.....	.....	.....	....	.....	8	7,446	422	.....	186	1,015	30	70
.....	.....	.....	...	58	112	28,733	1,154	290	273	4,239	808	71
.....	.....	.....	....	.....	361	9,614	533	100	125	1,225	.....	72
.....	.....	.....	....	.....	.....	2,939	234	6	63	14	.....	73
.....	.....	.....	....	.....	10	16,642	868	17	244	3,567	225	74
.....	7,112	1,800	....	.....	801	31,250	946	4	450	1,131	2,085	75
.....	.....	.....	....	10	480	33,141	944	34	479	4,430	.....	76
.....	.....	.....	....	.....	.....	682	151	.....	17	.....	.....	77
.....	.....	.....	....	.....	2	6,235	320	.....	157	698	250	78
.....	1,371	.....	....	606	294	32,124	997	60	411	3,252	.....	79
.....	.....	.....	....	.....	25	3,465	290	12	15	217	.....	80
.....	.....	.....	....	.....	103	2,197	297	2	94	68	153	81
.....	.....	.....	....	.....	108	3,040	232	.....	39	268	.....	82
.....	.....	.....	....	.....	32	1,885	216	.....	50	116	.....	83
.....	.....	.....	....	263	122	3,976	239	.....	69	410	40	84
.....	.....	.....	....	.....	300	3,704	226	.....	52	1,205	.....	85
.....	.....	.....	....	579	12	23,671	566	100	484	2,943	.....	86
.....	.....	.....	....	.....	19	10,990	434	.....	144	1,424	.....	87
.....	6,225	.....	....	.....	2,250	36,301	909	.....	194	4,955	.....	88
.....	.....	.....	....	.....	3	11,384	410	.....	148	711	.....	89
.....	.....	.....	....	.....	1	4,253	156	1	43	311	.....	90
.....	.....	.....	....	.....	32	4,000	353	.....	115	1,048	.....	91
.....	.....	.....	....	.....	625	4,130	455	.....	151	275	57	92
.....	.....	.....	....	.....	19	4,290	199	25	339	894	.....	93
.....	.....	.....	....	100	40	4,444	335	135	101	860	.....	94
.....	.....	.....	....	.....	.....	7,777	718	14	224	1,218	.....	95
.....	.....	.....	....	.....	192	39,820	856	81	296	4,717	.....	96
.....	.....	.....	....	.....	49	16,906	720	23	409	950	.....	97
.....	21,586	.....	....	50	178	99,626	4,380	576	746	3,585	....	98
2,500	.....	.....	....	.....	493	45,103	1,256	29	341	6,128	.....	99
.....	.....	.....	....	.....	125	3,167	240	.....	77	213	.....	100
.....	.....	.....	....	.....	267	24,455	737	973	212	4,767	217	101
.....	.....	.....	....	.....	48	2,715	199	.....	63	113	.....	102
.....	.....	.....	....	.....	222	21,215	946	8	418	4,019	.....	103
.....	.....	.....	....	.....	26	17,874	638	379	265	1,216	280	104
.....	.....	.....	....	.....	204	1,999	190	.....	31	385	36	105
.....	.....	.....	....	.....	15	17,671	539	1,451	217	2,442	.....	106

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Township Municipalities.	Disbursements, 1907.—*Continued.*						
	Board of Health.	Support of the poor and other charities.	County Treasurer for levies.	Payment on account of schools and education	Drainage works.	Sinking Fund investments and deposits.	Other investments and deposits.
	$	$	$	$	$	$	$
54. Brant	268	20	4,774	8,816			119
55. Brantford	156	1,033	4,653	15,978			
56. Brighton	51	36	2,826	6,104			
57. Brock	253	86	4,778	8,214			
58. Bromley	23	61	1,849	4,519	165		
59. Brooke	42	186	4,585	12,229	7,165		
60. Brougham	72		98	491			
61. Bruce	121	146	3,768	6,480		751	
62. Brudenell and Lyndoch		74		2,839			
63. Brunel	5	95		2,517			
64. Bucke	31	111					
65. Burford	34	809	3,831	11,424	1,787		51
66. Burgess N.			1,166	1,707			
67. Burleigh and Anstruther	147		194	1,557			
68. Burpee				861			
69. Caistor		5	1,890	4,236			
70. Caldwell	50	5		3,037	378		
71. Caledon	45	219	4,789	10,185	200		
72. Caledonia		43	1,413	4,154	883		
73. Calvin	4	5		1,146			
74. Cambridge	123	59	1,690	6,525	562		
75. Camden	49	588	1,720	6,356	6,244		
76. Camden E.	27	294	7,500	11,628			
77. Cameron				402			
78. Canborough		302	1,259	2,186			
79. Caradoc	489	136	6,994	9,536	2,498		
80. Carden		15	457	1,842		100	
81. Cardiff	16		222	976			
82. Cardwell	25	5		827			
83. Carling				993			
84. Carlow	28		451	1,448			
85. Carnarvon		20		1,703			
86. Carrick	99	46	4,491	11,622		471	
87. Cartwright	18	21	2,495	3,883			
88. Cavan	50	179	4,166	7,098	7,213		
89. Cayuga, N	76	10	3,897	4,836			
90. Cayuga S	4	13	1,399	2,238			
91. Chaffey	37	32		2,196			
92. Chandos	75	154	235	1,744			
93. Chapleau	30	7		2,118			
94. Chapman		13		2,158			
95. Chapple	79	5		2,152		78	250
96. Charlottenburgh	81	140	605	11,699	334		64
97. Charlotteville	10	108	2,660	7,072	378		1
98. Chatham	307	895	4,984	13,951	23,936		
99. Chinguacousy	177	45	9,804	14,077			5,108
100. Christie		5		1,403			
101. Clarence	524	5	2,417	7,901	448		
102. Clarendon and Miller		25	479	1,139			
103. Clarke	43	96	4,722	8,284			
104. Clinton		38	4,017	6,465			
105. Cockburn Island		5		708			425
106. Colborne	173	5	5,219	4,357			

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Disbursements, 1907.—*Continued.*								Assets on December 31, 1907			
School debentures redeemed.	Drainage debentures redeemed.	All other debentures redeemed.	Refund of moneys borrowed for current expenses.	Interest on loans, advances and debentures.	Discount on debentures sold.	Miscellaneous.	Total disbursements.	Cash in treasury.	Taxes in arrears.	Sinking Fund investments and deposits.	No.
$	$	$	$	$	$	$	$	$	$	$	
258	.....	.....	2,500	112	.....	168	23,741	651	358	.....	54
1,063	219	.....	.....	392	.....	309	36,539	6,965	431	.....	55
.....	.....	.....	4,483	95	.....	138	17,676	.....	1,795	.....	56
161	.....	500	9,000	544	.....	201	33,997	.....	2,138	.....	57
.....	413	.....	420	379	.....	72	9,033	1,273	1,841	.....	58
2,866	4,048	912	5,500	967	.....	828	52,381	.....	16,632	.....	59
.....	.....	.....	.....	.....	.....	15	999	117	348	.....	60
247	.....	.....	1,900	174	.....	203	19,134	2,344	75	751	61
129	.....	.....	.....	.....	.....	23	3,575	103	1,134	.....	62
220	.....	.....	.....	50	.....	10	3,764	501	1,769	.....	63
81	.....	.....	.....	138	.....	175	2,591	1,051	2,001	.....	64
.....	512	89	.....	99	.....	509	30,376	3,504	849	.....	65
.....	.....	.....	.....	.....	.....	16	3,421	376	8	.....	66
.....	.....	166	437	56	.....	28	3,247	436	287	.....	67
.....	.....	164	.....	57	.....	.....	1,240	61	1,143	.....	68
.....	.....	.....	400	9	.....	285	8,358	17	2,221	.....	69
99	.....	.....	1,009	31	.....	248	6,510	936	3,185	.....	70
.....	.....	.....	5,000	132	.....	252	27,586	1,147	149	.....	71
168	.....	.....	.....	56	.....	4	8,704	910	4,598	.....	72
150	.....	.....	.....	27	.....	68	1,717	1,222	449	.....	73
42	382	.....	980	228	.....	262	15,774	868	4,553	.....	74
337	5,586	.....	4,682	990	.....	79	31,247	3	12,797	.....	75
85	.....	.....	7,027	175	.....	249	32,872	269	471	.....	76
.....	.....	.....	50	1	.....	.....	621	61	183	.....	77
.....	.....	.....	609	9	.....	34	5,824	411	1,850	.....	78
364	770	.....	.....	136	.....	689	26,332	5,792	4,244	.....	79
135	.....	.....	.....	50	.....	2	3,135	330	422	100	80
89	.....	.....	.....	46	.....	61	2,024	173	1,567	.....	81
.....	.....	.....	.....	.....	.....	1	1,397	1,643	750	.....	82
57	.....	.....	300	28	.....	49	1,809	76	2,320	.....	83
181	.....	.....	415	58	.....	45	3,384	592	1,107	.....	84
130	.....	.....	300	42	.....	10	3,688	16	1,765	.....	85
.....	.....	.....	100	361	.....	101	21,364	2,307	11	6,796	86
399	.....	212	1,000	229	.....	96	10,355	635	172	.....	87
135	.....	.....	9,200	163	.....	228	34,490	1,811	2,144	.....	88
.....	.....	.....	500	75	.....	107	10,770	614	303	.....	89
.....	.....	.....	.....	.....	.....	5	4,170	83	254	.....	90
.....	.....	.....	.....	.....	.....	219	4,000	.....	2,678	.....	91
.....	.....	.....	599	34	.....	84	3,863	267	1,405	.....	92
165	.....	.....	.....	237	.....	150	4,164	126	859	.....	93
.....	.....	.....	.....	.....	.....	1	3,603	841	1,241	.....	94
28	.....	.....	1,910	187	.....	126	6,989	788	4,574	155	95
.....	.....	718	18,169	417	.....	98	38,275	1,545	10,285	.....	96
.....	.....	1,522	2,408	195	.....	450	16,906	.....	459	.....	97
1,549	10,895	2,604	26,653	4,121	.....	440	99,622	4	53,183	.....	98
380	.....	.....	7,000	283	.....	475	45,103	.....	539	.....	99
.....	.....	.....	.....	.....	.....	21	1,959	1,208	172	.....	100
324	76	.....	4,400	586	.....	266	23,853	602	14,549	.....	101
.....	.....	.....	.....	.....	.....	62	2,080	635	1,071	.....	102
243	.....	.....	955	43	.....	213	20,020	1,195	2,616	.....	103
103	.....	83	1,919	161	.....	167	15,731	2,143	681	.....	104
.....	.....	.....	.....	9	.....	39	1,828	171	2,012	.....	105
.....	.....	.....	2,500	91	.....	.....	16,997	674	170	.....	106

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Township Municipalities.	Assets on 31st December, 1907.—*Continued.*			
	All other investments and deposits.	Other property.	Miscellaneous.	Total assets.
	$	$	$	$
54. Brant	4,829	.....	2,542	8,380
55. Brantford	68,742	.....	6,710	82,848
56. Brighton	.....	700	500	2,995
57. Brock	.....	11,000	886	14,024
58. Bromley	.....	680	.....	3,794
59. Brooke	.....	.....	3,472	20,104
60. Brougham	.....	.....	12	477
61. Bruce	.....	1,200	3,594	7,964
62. Brudenell and Lyndoch	.....	650	.....	1,887
63. Brunel	.....	900	1,670	4,840
64. Bucke	.....	400	4,185	7,637
65. Burford	.....	900	601	5,864
66. Burgess N	.....	600	.....	984
67. Burleigh and Anstruther	.....	2,100	210	3,033
68. Burpee	.....	104	.....	1,308
69. Caistor	.....	1,000	.....	3,238
70. Caldwell	.....	494	250	4,865
71. Caledon	.....	2,000	.....	3,296
72. Caledonia	.....	800	920	7,228
73. Calvin	.....	.....	.....	1,671
74. Cambridge	.....	1,250	1,158	7,829
75. Camden	.....	2,500	4,808	20,108
76. Camden E	.....	4,600	60	5,400
77. Cameron	.....	.....	.....	244
78. Canborough	.....	225	.....	2,486
79. Caradoc	.....	2,800	1,032	13,868
80. Carden	.....	.....	935	1,787
81. Cardiff	.....	153	675	2,568
82. Cardwell	.....	.....	.....	2,393
83. Carling	.....	.....	343	2,739
84. Carlow	.....	65	830	2,594
85. Carnarvon	.....	.....	386	2,167
86. Carrick	.....	2,800	3,299	15,213
87. Cartwright	.....	2,250	848	3,905
88. Cavan	.....	5,700	1,747	11,402
89. Cayuga, N	.....	22	46	985
90. Cayuga S	.....	1,200	.....	1,537
91. Chaffey	.....	.....	.....	2,678
92. Chandos	.....	.....	.....	1,672
93. Chapleau	.....	621	3,625	5,231
94. Chapman	.....	235	.....	2,317
95. Chapple	250	360	2,157	8,284
96. Charlottenburgh	64	.....	3,686	15,580
97. Charlotteville	8,765	1,100	.....	10,324
98. Chatham	.....	2,500	43,537	99,224
99. Chinguacousy	32,769	1,000	3,140	37,448
100. Christie	.....	1,220	.....	2,600
101. Clarence	.....	2,342	7,693	25,186
102. Clarendon and Miller	.....	.....	20	1,726
103. Clarke	.....	6,350	257	10,418
104. Clinton	.....	1,030	2,394	6,248
105. Cockburn Island	425	994	.....	3,602
106. Colborne	.....	750	.....	1,594

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Liabilities on December 31, 1907.										
County levy.	Local school rates.	Railway debentures.	School debentures.	Drainage debentures.	All other debentures.	Loans for current expenses and interest.	Due Sinking Fund.	Miscellaneous.	Total liabilities.	No.
$	$	$	$	$	$	$	$	$	$	
.....	.....	.....	2,542	.....	.....	.....	.....	150	2,692	54
.....	.....	.....	5,800	1,235	.....	.....	.....	51	7,086	55
.....	.....	.....	.....	.....	.....	2,000	.....	.....	2,000	56
.....	68	.....	355	.....	5,500	2,190	.....	270	8,383	57
2,114	.....	.....	.....	6,891	.....	.....	.....	.....	9,005	58
.....	.....	.....	789	13,077	4,028	8,113	.....	1,103	27,110	59
.....	.....	.....	.....	.....	.....	.....	.....	49	49	60
.....	.....	.....	3,580	.....	.....	.....	.....	249	3,829	61
333	119	.....	.....	.....	.....	.....	.....	33	485	62
.....	738	.....	1,670	.....	.....	.....	.....	.....	2,408	63
.....	.....	.....	2,203	.....	.....	2,667	.....	6	4,876	64
.....	.....	.....	.....	1,694	90	.....	.....	1,872	3,656	65
.....	52	.....	.....	.....	.....	.....	.....	.....	52	66
194	111	.....	.....	.....	1,158	128	.....	.....	1,591	67
.....	300	.....	.....	.....	953	.....	.....	.....	1,253	68
1,890	.....	.....	.....	.....	.....	.....	.....	.....	1,890	69
.....	1,447	.....	.....	.....	.....	921	.....	507	2,875	70
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71
1,531	2,090	.....	920	.....	.....	.....	.....	.....	4,541	72
.....	698	.....	300	.....	.....	.....	.....	1	999	73
1,560	593	.....	858	2,883	2,582	.....	.....	80	8,556	74
.....	1,849	.....	3,433	16,753	1,800	5,465	.....	994	30,294	75
.....	.....	.....	.....	.....	.....	.....	.....	65	65	76
.....	.....	.....	.....	.....	.....	200	.....	.....	200	77
1,763	.....	.....	.....	.....	.....	125	.....	.....	1,888	78
.....	.....	.....	632	4,383	.....	.....	.....	1,581	6,596	79
.....	110	.....	1,035	.....	.....	203	.....	73	1,421	80
217	1,011	.....	603	.....	.....	200	.....	77	2,108	81
.....	685	.....	.....	.....	.....	.....	.....	255	940	82
.....	254	.....	344	.....	.....	200	.....	.....	798	83
.....	1,531	.....	830	.....	.....	.....	.....	165	2,526	84
.....	850	.....	386	.....	.....	30	.....	24	1,290	85
.....	.....	.....	3,200	.....	4,000	.....	.....	85	7,285	86
.....	.....	3,674	848	.....	.....	.....	.....	.....	4,522	87
.....	558	.....	1,110	6,225	.....	.....	.....	797	8,690	88
.....	.....	.....	.....	.....	.....	1,000	.....	.....	1,000	89
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90
.....	.....	.....	.....	.....	.....	155	.....	79	234	91
.....	853	.....	.....	.....	.....	.....	.....	143	996	92
.....	.....	.....	3,617	.....	.....	526	.....	.....	4,143	93
.....	1,342	.....	.....	.....	.....	.....	.....	234	1,576	94
.....	2,445	.....	1,772	.....	.....	2,672	.....	65	6,954	95
.....	4,361	.....	3,542	.....	4,169	4,611	.....	284	16,967	96
.....	98	.....	.....	.....	.....	1,294	.....	.....	1,392	97
4,876	566	.....	5,401	79,157	7,658	26,632	.....	10,463	134,753	98
.....	.....	.....	3,140	.....	.....	255	.....	78	3,473	99
.....	660	.....	.....	.....	.....	.....	.....	.....	660	100
3,460	6,966	.....	7,672	898	.....	4,600	.....	69	23,665	101
18	474	.....	.....	.....	.....	.....	.....	20	512	102
.....	1,702	.....	257	.....	.....	.....	.....	.....	1,959	103
.....	79	.....	2,229	.....	917	.....	.....	.....	3,225	104
.....	732	.....	.....	.....	.....	.....	.....	9	741	105
.....	.....	.....	.....	.....	.....	2,043	.....	60	2,103	106

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Township Municipalities and Counties in which located.	Receipts, 1907. Balance from 1906	Municipal and school taxes.	Licenses.	Fees, rents, fines, etc.	Interest and dividends.	Refund of money invested.	Borrowed for current expenses.
	$	$	$	$	$	$	$
107. Colchester N., Essex	551	20,981	....	4	96	.....	13,047
108. Colchester S., Essex	3,047	26,677	268	178	120	.....	6,400
109. Coleman, Nipissing	.....	19,319	39	.....	.....	.....	16,200
110. Collingwood, Grey	1,454	18,667	....	3	2	.....	9,266
111. Cornwall, Stormont	3,049	27,064	370	.....	.....	.....	19,500
112. Cramahe, Northumberland	158	13,934	....	28	.....	.....	1,600
113. Crosby N., Leeds	966	5,696	....	3	.....	.....	.....
114. Crosby S., Leeds	548	9,239	101	41	.....	.....	2,358
115. Crowland, Welland	1,338	6,184	55	601	.....	.....	2,000
116. Culross, Bruce	5,635	13,332	51	2	37	.....	.....
117. Cumberland, Russell	1,032	16,279	192	.....	.....	.....	2,962
118. Dalhousie, Sherbrooke N., Lanark	1,096	6,274	....	.....	.....	.....	.....
119. Dalton, Victoria	155	1,687	....	.....	.....	.....	78
120. Darling, Lanark	190	1,895	.....	.....	16	.....	.....
121. Darlington, Durham	825	24,540	....	16	24	.....	2,350
122. Dawn, Lambton	104	30,485	....	33	111	.....	3,000
123. Day and Bright add., Algoma	424	1,902	....	.....	.....	.....	.....
124. Delaware, Middlesex	4,563	10,632	45	9	27	670	3,748
125. Denbigh, Ab. & Ash., Len. & Ad.	187	2,324	....	.....	.....	.....	.....
126. Derby, Grey	51	12,910	....	3	3	2	7,475
127. Dereham, Oxford	2,593	33,034	....	600	43	.....	.....
128. Dilke, Rainy River	.....	894	115	6	.....	.....	800
129. Dorchester N., Middlesex	1,716	27,357	120	.....	15	.....	1,000
130. Dorchester S., Elgin	.....	17,380	....	4	8	.....	385
131. Douro, Peterborough	317	9,507	....	.....	.....	.....	1,869
132. Dover, Kent	.....	32,852	331	.....	89	.....	22,476
133. Downie, Perth	2,638	19,406	156	63	.....	.....	6,300
134. Draper, Muskoka	87	3,542	69	.....	.....	.....	300
135. Drummond, Lanark	1,193	13,491	105	.....	52	3,391	2,968
136. Drury, Denison & Graham, Sud.	1,169	5,904	145	358	.....	.....	1,000
137. Dumfries N., Waterloo	264	14,436	23	1	.....	.....	3,700
138. Dumfries S., Brant	2,453	18,699	96	19	21	.....	2,000
139. Dummer, Peterborough	1,481	8,499	....	23	12	.....	.....
140. Dungannon, Hastings	1,017	2,256	30	.....	.....	.....	.....
141. Dunn, Haldimand	558	5,405	72	.....	3	.....	.....
142. Dunwich, Elgin	4,437	28,961	108	.....	.....	.....	2,500
143. Dymond, Nipissing	88	3,434	....	.....	.....	400	250
144. Dysart, Guilford, &c., Haliburton	430	9,710	30	1,195	14	.....	500
145. Easthope N., Perth	2,219	15,678	109	1	41	.....	.....
146. Easthope S., Perth	2,284	12,405	310	4	36	.....	2,783
147. Eastnor, Bruce	425	7,641	116	107	10	100	4,344
148. Edwardsburg, Grenville	.....	17,445	195	39	653	.....	6,717
149. Egremont, Grey	4,578	15,673	....	1	22	.....	1,682
150. Ekfrid, Middlesex	332	22,418	90	13	26	101	700
151. Elderslie, Bruce	1,722	13,743	....	2	40	.....	550
152. Eldon, Victoria	249	17,205	255	1	.....	.....	4,550
153. Elizabethtown, Leeds	.....	23,705	74	30	21	.....	3,253
154. Ellice, Perth	13,189	27,253	218	.....	236	.....	10,000
155. Elma, Perth	13,532	32,335	225	.....	328	.....	7,885
156. Elmsley N., Lanark	183	4,524	5	.....	.....	.....	1,343
157. Elmsley S., Leeds	102	4,582	76	8	5	.....	1,031
158. Elzevir & Grimsthorpe, Hastings	.....	6,334	60	7	.....	.....	1,862
159. Emily, Victoria	1,027	13,486	....	.....	15	.....	1,500

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Receipts, 1907.							Disbursements, 1907.					No.
Borrowed on debentures for schools.	Borrowed on debentures for drainage.	Borrowed on debentures for other purposes.	Premiums on debentures sold.	County grants.	Miscellaneous.	Total receipts.	Allowances, salaries and commissions.	Law costs.	Other expenses of municipal government.	Roads and bridges.	Buildings and other works.	
$	$	$	$	$	$	$	$	$	$	$	$	
.....	2,281	.....	....	.....	.....	36,960	808	27	384	2,757	.....	107
.....	.....	.....	....	.....	19	36,709	1,263	1,648	729	1,858	.....	108
.....	.....	.....	....	.....	.....	35,558	1,925	.....	222	8,133	.....	109
.....	.....	.....	....	.....	20	29,412	959	125	435	4,502	61	110
.....	28,539	.....	....	.....	.....	78,522	1,463	586	726	7,241	.....	111
.....	.....	.....	....	.....	120	15,840	734	4	251	2,782	140	112
.....	.....	1,752	....	.....	188	8,605	330	.....	170	573	.....	113
1,800	.....	.....	....	.....	9	14,096	461	.....	127	2,351	.....	114
.....	.....	.....	....	.....	4	10,182	260	*2,400	163	434	....	115
.....	.....	.....	....	746	27	19,830	676	23	200	2,521	.....	116
.....	.....	.....	....	.....	98	20,563	1,346	.....	174	3,636	.....	117
.....	.....	.....	....	.....	39	7,409	360	.....	165	778	40	118
.....	.....	.....	....	100	.....	2,020	215	.....	26	417	.....	119
.....	.....	.....	....	.....	16	2,117	288	.....	67	196	.....	120
3,000	.....	.....	....	19	120	30,894	871	5	407	3,994	.....	121
.....	3,018	.....	....	.....	5	36,756	812	132	573	2,903	.....	122
.....	.....	.....	....	.....	.....	2,326	231	.....	74	116	.....	123
.....	.....	.....	....	588	370	20,052	401	25	486	2,815	.....	124
.....	.....	.....	....	28	7	2,546	264	.....	57	265	.....	125
.....	2,217	.....	....	.....	321	22,982	546	127	219	3,767	.....	126
.....	.....	.....	....	.....	684	36,954	1,485	142	399	7,507	155	127
.....	.....	.....	....	.....	.....	1,815	196	.....	5	1,035	.....	128
.....	.....	.....	....	1,180	303	31,691	1,082	145	277	5,355	244	129
.....	.....	.....	....	.....	340	18,117	816	230	243	6,100	.....	130
.....	.....	.....	....	.....	105	11,798	563	80	121	1,624	.....	131
.....	.....	.....	....	.....	1,322	57,070	2,773	173	803	3,243	.....	132
.....	1,219	.....	....	1,277	67	31,126	866	10	272	8,212	.....	133
.....	.....	.....	....	.....	792	4,790	347	13	86	1,057	.....	134
.....	.....	.....	....	.....	356	21,556	416	38	175	2,008	.....	135
.....	.....	.....	....	.....	341	8,917	659	3	239	1,460	.....	136
.....	.....	.....	....	.....	25	18,449	745	7	393	3,074	.....	137
.....	.....	.....	....	.....	95	23,383	1,031	25	322	4,720	.....	138
.....	.....	.....	....	.....	32	10,047	617	.....	127	1,450	.....	139
1,000	.....	.....	....	263	874	5,440	222	.....	80	1,001	.....	140
.....	.....	.....	....	.....	2	6,040	257	.....	61	1,037	.....	141
2,400	1,356	.....	....	.....	617	40,379	1,237	180	371	8,152	.....	142
.....	.....	.....	....	.....	194	4,366	334	16	117	855	.....	143
.....	.....	.....	....	.....	74	11,953	422	28	190	2,518	.....	144
.....	3,408	.....	....	1,675	369	23,500	725	41	323	4,939	.....	145
.....	.....	.....	....	1,106	53	18,981	618	194	334	4,421	.....	146
.....	.....	.....	....	746	782	14,271	500	.....	348	2,265	.....	147
.....	.....	.....	....	.....	.....	25,049	804	82	366	2,868	.....	148
2,900	.....	.....	....	.....	1,444	26,300	598	17	306	3,075	.....	149
.....	1,186	.....	....	164	255	25,280	841	9	298	5,597	.....	150
1,500	.....	.....	....	260	151	17,968	661	15	186	2,069	.....	151
.....	.....	.....	....	.....	130	22,390	994	279	203	3,126	1,350	152
.....	.....	.....	....	.....	424	27,507	1,128	30	437	2,122	.....	153
3,000	13,813	.....	....	1,129	4,981	73,819	1,337	319	415	8,698	.....	154
2,500	6,744	750	....	4,493	630	69,422	1,161	1,794	578	8,588	.....	155
.....	.....	.....	....	.....	234	6,289	266	.....	81	1,429	.....	156
.....	.....	.....	....	.....	1	5,805	361	.....	75	1,268	26	157
.....	.....	.....	....	.....	100	8,363	538	32	69	381	.....	158
.....	.....	.....	....	.....	106	16,134	837	.....	160	2,220	.....	159

*Including $2,000 paid John and Margaret Biggar.

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Township Municipalities.	Disbursements, 1907.—*Continued.* Board of Health.	Support of the poor and other charities.	County Treasurer for levies.	Payment on account of schools and education.	Drainage works.	Sinking Fund investments and deposits.	Other investments and deposits.
	$	$	$	$	$	$	$
107. Colchester N.	.....	200	2,701	4,479	5,969	.....	.....
108. Colchester S.	17	129	2,723	7,999	3,160	.....	.....
109. Coleman	263	.....	.....	1.160	.....	.....	.....
110. Collingwood	46	192	2,522	9,573	.....	.....	.....
111. Cornwall	328	400	3,482	10,245	20,745	.....	.....
112. Cramahe	37	70	2,612	4,679	.....	.....	.....
113. Crosby N.	.....	9	1,079	3,715	.....	.....	.....
114. Crosby S.	.....	.....	1,240	7,319	.....	.....	525
115. Crowland	14	53	1,462	3,205	641	.....	.....
116. Culross	27	15	3,551	10,868	.....	.....	.....
117. Cumberland	66	73	2,888	5,782	526	.....	158
118. Dalhousie, Sherbrooke N.	14	10	1,267	3,873	.....	.....	.....
119. Dalton	.....	5	389	849	.....	.....	.....
120. Darling	2	13	258	1,264	.....	.....	.....
121. Darlington	56	159	5,931	14,499	.....	.....	.....
122. Dawn	409	1,074	2,915	8,510	7,258	.....	.....
123. Day and Bright add.	19	1,239	.....	.....	.....	.....	.....
124. Delaware	77	69	5,511	3,805	714	.....	240
125. Denbigh, Abinger & Ashby	.....	8	213	1,225	.....	.....	.....
126. Derby	156	122	1,875	4,295	2,603	.....	20
127. Dereham	212	117	6,034	10,503	3,749	.....	.....
128. Dilke	.....	.....	.....	170	.....	.....	.....
129. Dorchester N.	77	63	6,862	9,193	1,582	.....	.....
130 Dorchester S.	17	20	2,671	5,289	2,071	.....	.....
131. Douro	33	118	2,719	3,967	.....	.....	.....
132. Dover	471	968	2,720	9,350	22,415	.....	618
133. Downie	168	238	4,608	5,544	14	.....	1,219
134. Draper	.....	110	.....	1,955	.....	.....	.....
135. Drummond	25	5	3,779	5,459	4,611	.....	200
136. Drury, Denison & Graham	60	18	.....	4,600	.....	.....	.....
137. Dumfries N.	100	.....	3,511	5,707	.....	.....	.....
138. Dumfries S.	88	418	3,019	8,318	55	.....	.....
139. Dummer	2	103	1,976	4,267	.....	.....	.....
140. Dungannon	.....	.....	170	2,564	.....	.....	.....
141. Dunn	4	135	1,669	2,692	.....	.....	.....
142. Dunwich	35	30	4,883	10,769	1,021	.....	.....
143. Dymond	97	56	.....	1,601	.....	.....	.....
144. Dysart, Guilford, &c.	.....	32	1,374	2,098	.....	.....	.....
145. Easthope N.	50	120	3,852	4,966	446	.....	.....
146. Easthope S.	38	5	2,189	4,703	3,851	.....	.....
147. Eastnor	131	108	621	3,058	1,281	.....	.....
148. Edwardsburg	85	13	3,150	11,115	200	.....	.....
149. Egremont	.....	20	2,900	10,652	3,571	.....	.....
150. Ekfrid	91	145	3,119	5,696	2,956	.....	.....
151. Elderslie	27	.....	3,403	7,889	.....	.....	.....
152. Eldon	69	97	2,822	6,885	308	.....	.....
153. Elizabethtown	14	130	3,531	11,733	104	.....	.....
154. Ellice	733	82	3,937	9,576	25,277	.....	.....
155. Elma	133	141	5,360	11,667	11,758	237	.....
156. Elmsley N.	40	5	1,760	2,705	.....	.....	.....
157. Elmsley S.	1	.....	872	2,708	.....	.....	.....
158. Elzevir and Grimsthorpe	.....	94	1,535	3,091	.....	.....	.....
159. Emily	37	8	4,514	5,639	.....	.....	.....

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Disbursements, 1907.—*Continued.*								Assets on Dec. 31st, 1907.			
School debentures redeemed.	Drainage debentures redeemed.	All other debentures redeemed.	Refund of moneys borrowed for current expenses.	Interest on loans, advances and debentures.	Discount on debentures sold.	Miscellaneous.	Total disbursements.	Cash in treasury.	Taxes in arrears.	Sinking Fund investments and deposits.	No.
$	$	$	$	$	$	$	$	$	$	$	
78	5,526	648	10,000	2,020	.....	1,362	36,959	1	19,400	.....	107
252	5,179	1,636	5,000	2,656	.....	349	34,598	2,111	18,274	.....	108
.....	.....	.....	20,300	773	.....	582	33,358	2,200	12,249	.....	109
150	.....	114	9,266	339	.....	273	28,557	855	311	.....	110
479	2,358	.....	15,771	4,188	1,302	326	69,640	8,882	3,694	.....	111
200	.....	.....	1,600	169	.....	411	13,689	2,151	3,713	.....	112
117	.....	406	.....	259	.....	1,911	8,569	36	1,479	.....	113
.....	.....	.....	1,505	.....	.....	248	13,776	320	.....	.....	114
.....	.....	.....	600	74	.....	134	9,440	742	1,279	.....	115
100	.....	.....	.....	31	.....	.....	18,012	1,818	83	.....	116
380	637	110	2,500	732	.....	185	19,193	1,370	15,620	.....	117
.....	.....	187	.....	59	.....	20	6,773	636	731	.....	118
.....	.....	.....	.....	.....	.....	4	1,905	115	347	.....	119
.....	.....	.....	.....	.....	.....	16	2,104	13	46	.....	120
170	.....	.....	2,350	16	.....	391	28,849	2,045	150	.....	121
467	7,610	115	1,000	1,509	.....	1,406	36,693	63	28,950	.....	122
.....	.....	.....	.....	.....	.....	1	1,680	646	893	.....	123
.....	523	....	4,742	130	.....	55	19,623	1,029	2,020	.....	124
.....	.....	.....	250	6	.....	2	2,290	256	740	.....	125
104	303	.....	7,475	391	.....	315	22,318	664	10	.....	126
.....	3,429	.....	.....	1,008	.....	71	34,811	2,143	32	.....	127
.....	.....	.....	.....	10	.....	125	1,541	274	773	.....	128
.....	435	.....	1,000	204	.....	372	26,891	4,800	1,106	.....	129
.....	.....	.....	367	228	.....	65	18,117	.....	437	.....	130
53	120	.....	1,869	227	.....	36	11,530	268	185	.....	131
590	7,603	.....	1,920	3,048	.....	369	57,064	6	18,914	.....	132
.....	686	.....	6,300	230	.....	39	28,406	2,720	41	.....	133
220	.....	.....	300	32	.....	3	4,123	667	2,153	.....	134
.....	354	.....	2,368	413	.....	54	19,905	1,651	74	.....	135
94	.....	.....	1,000	38	.....	53	8,224	693	3,836	.....	136
.....	.....	1,997	2,100	293	.....	268	18,195	254	1,239	.....	137
352	.....	.....	2,220	284	.....	207	21,059	2,324	2	.....	138
.....	.....	.....	.....	9	.....	260	8,811	1,236	477	.....	139
50	.....	.....	.....	9	.....	13	4,109	1,331	115	.....	140
.....	.....	.....	.....	1	.....	29	5,885	155	52	.....	141
.....	1,913	.....	2,500	406	.....	263	31,760	8,619	2,849	.....	142
281	.....	.....	650	96	.....	245	4,348	18	1,402	.....	143
130	.....	.....	700	71	.....	8	7,571	4,382	2,214	.....	144
.....	928	.....	.....	106	.....	3,673	20,169	3,331	12	.....	145
.....	717	.....	1,464	340	.....	107	18,981	.....	1,300	.....	146
820	898	239	2,779	932	.....	287	14,267	4	7,243	.....	147
.....	.....	.....	6,100	124	.....	142	25,049	.....	7,765	.....	148
734	234	85	1,682	697	.....	13	24,584	1,716	.....	.....	149
338	1,359	.....	700	250	.....	585	21,984	3,296	9,242	.....	150
396	.....	.....	550	268	.....	60	15,524	2,444	.....	.....	151
501	.....	.....	3,650	283	.....	122	20,689	1,701	286	.....	152
.....	.....	.....	7,572	65	.....	20	26,886	621	3,549	.....	153
379	3,351	.....	10,000	1,773	547	372	66,796	7,023	1,154	.....	154
1,173	4,210	1,078	7,885	2,703	124	235	58,825	10,597	650	691	155
.....	.....	.....	.....	.....	.....	3	6,289	.....	941	.....	156
.....	.....	.....	467	21	.....	7	5,805	.....	805	.....	157
244	.....	.....	2,037	58	.....	284	8,363	.....	2,560	.....	158
.....	.....	211	1,500	66	.....	45	15,237	897	.....	.....	159

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Assets on December 31, 1907.—*Concluded.*

Township Municipalities.	All other investments and deposits.	Other property.	Miscellaneous.	Total assets.
	$	$	$	$
107. Colchester N		1,300	7,290	27,991
108. Colchester S		3,500	4,539	28,424
109. Coleman		1,200	2 500	18,149
110. Collingwood		1,500	998	3,664
111. Cornwall		3,600	33,341	49,517
112. Cramahe		4,700	1,800	12,364
113. Crosby N		500	4,179	6,194
114. Crosby S	4,216	1,400	1,800	7,736
115. Crowland		725		2,746
116. Culross		265	807	2,973
117. Cumberland	158	5,800	2,812	25,760
118. Dalhousie, Sherbrooke N		800		2,167
119. Dalton			51	513
120. Darling	200	60		319
121. Darlington		670	3,442	6,307
122. Dawn		1,350	6,330	36,693
123. Day and Bright				1,539
124. Delaware	240	1,640		4,929
125. Denbigh, Abinger & Ashby				996
126. Derby	18	2,200	6,599	9,491
127. Dereham		1,500	6,834	10,509
128. Dilke		20		1,067
129. Dorchester N			3,219	9,125
130. Dorchester S		1,105	2,899	4,441
131. Douro		400	1,363	2,216
132. Dover	618	2,000	11,461	32,999
133. Downie	1,219	800	57	4,837
134. Draper			728	3,548
135. Drummond	200	800		2,725
136. Drury, Denison & Graham		350	206	5,085
137. Dumfries N		950		2,443
138. Dumfries S		1,990	4,659	8,975
139. Dummer		1,000		2,713
140. Dungannon	252	200	1,100	2,998
141. Dunn		950		1,157
142. Dunwich		350	3,242	15,060
143. Dymond		415	3,125	4,960
144. Dysart, Guilford, &c		2,500	524	9,620
145. Easthope N		680	233	4,256
146. Easthope S		130	3,345	4,775
147. Eastnor	100	2,155	870	10,372
148. Edwardsburg	17,877		261	25,903
149. Egremont		300	9,749	11,765
150. Ekfrid		800	3,041	16,379
151. Elderslie		1,500	4,931	8,875
152. Eldon		1,350	2,554	5,891
153. Elizabethtown		2,400		6,570
154. Ellice			45,361	53,538
155. Elma			65,999	77,937
156. Elmsley N		500		1,441
157. Elmsley S		525		1,330
158. Elzevir and Grimsthorpe		925	2,829	6,314
159. Emily		575		1,472

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES.—*Continued.*

Liabilities on December 31, 1907.										
County levy.	Local school rates.	Railway debentures.	School debentures.	Drainage debentures.	All other debentures.	Loans for current expenses and interest.	Due Sinking Fund.	Miscellaneous.	Total liabilities.	No.
$	$	$	$	$	$	$	$	$	$	
1,474	5,430	.....	1,448	26,613	.....	11,459	.....	1,986	48,410	107
.....	7,564	.....	1,350	40,363	.....	9,174	.....	2,419	60,870	108
.....	6,989	.....	.....	.....	.....	3,200	.....	135	10,324	109
.....	.....	.....	868	.....	974	.....	.....	194	2,036	110
.....	33	.....	347	58,989	.....	26,625	.....	16,779	102,773	111
.....	.....	.....	1,800	.....	.....	.....	.....	80	1,880	112
.....	.....	1,346	4,179	.....	.....	.....	.....	.....	5,525	113
.....	.....	.....	1,800	.....	.....	1,521	.....	.... ..	3,321	114
.....	1,530	.....	.....	.....	.....	1,400	.....	3	2,933	115
.....	.....	.....	682	.....	.....	.....	.....	5	687	116
3,764	6,866	.....	2,312	7,368	1,728	2,462	.....	236	24,736	117
.....	.....	.....	.....	.....	1,293	.....	.....	.....	1,293	118
.....	.....	.....	.....	.....	.....	78	.....	207	285	119
.....	84	.....	.....	.....	.. ...	.....	.....	58	142	120
.....	.....	.....	3,177	.....	.....	.....	.....	175	3,352	121
2,725	9,051	.....	2,009	22,961	381	3,000	.....	2,369	42,496	122
.....	760	.....	.....	.....	.....	.....	.....	.....	760	123
.....	.....	.....	.....	.....	.....	3,748	.....	248	3,996	124
.....	.....	.....	.....	.....	.....	.....	.....	133	133	125
.....	.....	.....	370	6,207	.....	...	.....	242	6,819	126
.....	.....	.....	.....	15,932	.....	.....	.....	1,325	17,257	127
.....	276	.....	.....	.....	.....	800	.....	108	1,184	128
.....	.....	.....	.....	3,646	.....	.....	.....	540	4,186	129
3,929	.....	.....	.....	.....	.....	385	.....	388	4,702	130
112	.....	.....	1,348	2,927	.....	.....	.....	245	4,632	131
3,400	1,010	.....	1,322	54,272	.....	22,476	.....	526	83,006	132
.....	.....	.....	.....	4,058	.....	.....	.....	340	4,398	133
.....	1,695	.....	320	.....	.....	309	.....	.....	2,324	134
.....	.....	.....	.....	8,712	.....	600	.....	.....	9,312	135
.....	155	.....	206	.....	.....	.....	.....	100	461	136
.....	.....	.....	.....	.....	4,237	1,600	.....	120	5,957	137
.....	.....	.....	4,657	.....	.....	660	.....	.....	5,317	138
.....	.....	.....	.....	.....	.....	.....	.....	30	30	139
.....	1,700	.....	1,100	... .	.....	.....	.....	.....	2,800	140
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	141
7,180	.....	.....	2,514	7,333	.....	.....	.....	550	17,577	142
.....	678	.....	1,141	.....	.....	.....	.....	.....	1,819	143
1,443	2,496	.....	520	.....	.....	500	.....	... .	4,959	144
.....	.....	.....	.....	5,562	.....	.....	.....	.....	5,562	145
.....	.....	.....	.....	7,317	.....	1,319	.....	818	9,454	146
.....	3,600	.....	420	12,214	2,509	1,626	.....	85	20,454	147
.....	.....	.....	.....	.....	.....	6,787	.....	175	6,962	148
.....	.....	.....	9,749	3,857	834	.. ..	.....	.....	14,440	149
6,100	.....	.....	2,314	9,190	.....	.....	.....	2,227	19,831	150
.....	.....	.....	4,931	.....	.....	.....	.....	.....	4,931	151
.....	.....	.....	2,554	.....	.....	900	.....	1,516	4,970	152
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	153
.....	.....	.....	4,860	44,501	.....	....		7,423	56,784	154
.....	30	8,900	3,599	50,389	750	....		11,754	75,422	155
.....	.....	.....	.....	.....	.....	1,343	.....	.....	1,343	156
.....	.....	.....	.....	.....	.....	564	.....	682	1,246	157
.....	.....	.....	1,137	.....	.....	1,862	.....	.....	2,999	158
.....	.....	.....	.....	.....	684	.....	.....	.....	684	159

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Township Municipalities and Counties in which located.	Receipts, 1907.						
	Balance from 1906.	Municipal and school taxes.	Licenses.	Fees, rents, fines, etc.	Interest and dividends.	Refund of money invested.	Borrowed for current expenses.
	$	$	$	$	$	$	$
160 Emo, Rainy River	666	3,682	141	2	.....	.....	861
161. Enniskillen, Lambton	507	34,237	....	.....	493	.....	.....
162. Ennismore, Peterborough	484	4,306	....	.....	7	.....	300
163. Eramosa, Wellington	1,451	16,364	158	8	35	.....	.....
164. Erin, Wellington	289	16,203	151	8	.....	.....	.....
165. Ernestown, Lennox & Addington	1,300	16,737	96	16	890	320	3,500
166. Escott Front, Leeds	259	6,367	124	23	.....	.....	500
167. Esquesing, Halton	1,815	20,868	180	35	1,704	81	1,788
168. Essa, Simcoe	3,543	21,882	204	....	.....	.....	4,020
169. Etobicoke, York	1,523	33,230	198	1	609	.....	8,000
170. Euphemia, Lambton	4,236	11,566	....	63	.....	.....	.....
171. Euphrasia, Grey	2,326	15,948	....	15	29	.....	.....
172. Evanturel, Nipissing	463	787	....	111	.....	.....	899
173. Faraday, Hastings	.....	2,574	....	.....	.....	.....	.....
174. Fenelon, Victoria	578	12,810	....	.....	.....	.....	1,000
175. Ferris, Nipissing	957	2,901	54	88	32	.....	.....
176. Finch, Stormont	2,549	23,821	219	12	.....	.....	5,223
177. Fitzroy, Carleton	228	9,338	96	4	.....	.....	.....
178. Flamboro E., Wentworth	.....	17,336	101	23	38	.....	101
179. Flamboro, W., Wentworth	3,059	15,741	180	83	663	.....	.....
180. Flos, Simcoe	6,302	19,968	255	15	165	.....	....
181. Foley, Parry Sound	1,493	1,357	70	.....	.....	.....	.....
182. Fredericksburg N, Lennox & Add.	800	8,657	....	.....	102	.....	2,500
183. Fredericksburg S., Lennox & Add.	916	6,361	....	.....	7	.....	831
184. Fullarton, Perth	499	16,088	....	36	.....	.....	3,200
185. Gainsborough, Lincoln	150	11,524	....	1	.....	.....	1,866
186. Ga way & Cavendish, Peterboro'	328	1,629	....	.....	.....	.....	.....
187. Garafraxa E., Dufferin	961	13,079	....	.....	.....	.....	1,500
188. Garafraxa, W., Wellington	2,533	18,013	....	1	41	.....	2,000
189. Georgina, York	91	7,908	18	.....	.....	.....	1,050
190. Glamorgan, Haliburton	.....	1,493	30	.....	.....	.....	650
191. Glanford, Wentworth	1,564	7,541	72	50	276	152	.....
192. Glenelg, Grey	2,030	11,473	48	17	35	.....	500
193. Gloucester, Carleton	732	31,885	405	33	.....	.....	8,700
194. Goderich, Huron	.....	12,440	....	.....	.....	.....	4,650
195. Gordon, Manitoulin	897	1,899	....	.....	.....	50	.....
196. Gosfield, N., Essex	741	17,219	....	4	82	.....	2,000
197. Gosfield, S., Essex	49	17,403	....	1	97	.....	13,450
198. Goulbourn, Carleton	4,103	12,484	....	.....	253	18	4,875
199. Gower, N., Carleton	720	11,828	144	.....	38	185	.....
200. Gower, S., Grenville	278	3,406	15	.....	.....	.....	788
201. Grantham, Lincoln	1,338	13,782	45	36	75	.....	.....
202. Grattan, Renfrew	1,609	1,127	....	2	.....	.....	.....
203. Greenock, Bruce	1,264	14,815	240	11	24	122	8,986
204. Grey, Huron	.....	28,271	158	24	644	26,843	4,671
205. Griffith & Matawatchan, Renfrew	78	1,204	....	.....	.....	.....	.....
206. Grimsby, N., Lincoln	1,203	10,548	....	.....	.....	.....	1,681
207. Grimsby S., Lincoln	1,035	8,818	....	.....	10	.....	400
208. Guelph, Wellington	.....	12,076	53	.....	620	4,850	8,410
209. Gwillimbury E., York	.....	18,327	144	.....	506	.....	.....
210. Gwillimbury N., York	.....	7,846	96	.....	.....	.....	1,282
211. Gwillimbury W., Simcoe	1,258	12,883	....	.....	20	.....	.....
212. Hagar, Sudbury	279	730	....	24	.....	.....	150

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Receipts, 1907.—*Continued*							Disbursements, 1907.					
Borrowed on debentures for schools.	Borrowed on debentures for drainage.	Borrowed on debentures for other purposes.	Premiums on debentures sold.	County grants.	Miscellaneous.	Total receipts.	Allowances, salaries and commissions.	Law costs.	Other expenses of municipal government.	Roads and bridges.	Buildings and other works.	No.
$	$	$	$	$	$	$	$	$	$	$	$	
.....	.....	.....	.....	.....	37	5,389	547	20	161	757	100	160
2,700	18,402	.....	.....	41	886	57,266	1,743	1,572	806	10,955	.....	161
.....	.....	.....	.....	100	.....	5,197	304	9	127	866	.....	162
.....	.....	.....	.....	.....	6	18,022	732	16	499	2,037	.....	163
.....	.....	.....	.....	.....	48	16,699	654	2	138	2,365	.....	164
.....	.....	.....	.....	.....	187	23,046	637	131	230	4,094	1,300	165
.....	.....	.....	.....	.....	5	7,278	467	2	125	1,465	.....	166
.....	.....	.....	.....	.....	205	26,676	1,091	6	417	9,521	.....	167
.....	.....	.....	.....	.....	221	29,870	1,112	559	238	5,885	.....	168
17,000	.....	4,885	.....	.....	3,835	69,281	2,246	569	973	20,946	627	169
.....	.....	.....	.....	.....	130	15,995	615	27	263	3,326	.....	170
.....	.....	.....	.....	.....	17	18,335	820	5	288	2,427	40	171
.....	.....	.....	.....	.....	.....	2,260	264	.....	67	770	.....	172
.....	.....	.....	.....	263	195	3,032	365	.....	29	285	.....	173
.....	.....	.....	.....	56	99	14,543	540	162	179	1,840	.....	174
.....	.....	.....	.....	.....	5	4,037	566	13	123	216	.....	175
1,000	.....	.....	.....	.....	1,065	33,889	1,428	76	498	5,661	.....	176
.....	.....	.....	.....	.....	113	9,779	643	96	196	3,606	200	177
.....	.....	.....	.....	57	.....	17,656	884	52	180	3,485	.....	178
.....	.....	.....	.....	.....	266	19,992	1,003	13	314	4,028	.....	179
.....	.....	.....	.....	.....	1,137	27,842	1,284	54	526	4,094	.....	180
.....	.....	.....	.....	.....	200	3,120	276	47	106	610	.....	181
.....	.....	.....	.....	.....	161	12,220	377	.....	120	1,754	.....	182
.....	.....	.....	.....	.....	2	8,117	256	.....	46	751	.....	183
.....	.....	.....	.....	1,184	579	21,586	729	.....	272	5,948	.....	184
.....	.....	.....	.....	.....	*1,414	14,955	463	417	206	2,903	.....	185
.....	.....	.....	.....	.....	300	2,257	217	.....	66	.....	.....	186
.....	.....	.....	.....	.....	153	15,693	561	12	238	2,738	.....	187
.....	.....	.....	.....	.....	306	22,897	699	.....	309	7,024	.....	188
.....	.....	.....	.....	.....	32	9,129	491	202	127	1,902	75	189
.....	.....	.....	.....	.....	18	2,191	200	88	76	96	....	190
.....	.....	.....	.....	.....	126	9,781	619	.....	147	460	.....	191
1,500	.....	.....	.....	.....	199	15,802	764	158	286	1,993	50	192
.....	.....	1,500	.....	.....	599	43,854	2,390	133	569	8,710	.....	193
.....	.....	.....	.....	.....	2	17,092	594	82	190	2,707	.....	194
.....	.....	.....	.....	.....	500	3,346	229	.....	52	1,062	.....	195
2,700	5,175	.....	.....	.....	1,233	29,154	804	1,874	451	2,321	1,330	196
1,800	4,854	.....	.....	.....	2,508	40,162	990	1,791	340	5,822	.....	197
.....	.....	.....	.....	.....	658	22,391	1,255	.....	315	3,163	.....	198
.....	7,245	.....	.....	.....	.....	20,160	568	99	185	916	.....	199
.....	.....	.....	.....	.....	2	4,489	252	.....	134	373	50	200
.....	.....	.....	.....	.....	35	15,311	716	139	320	4,651	.....	201
.....	.....	.....	.....	.....	173	5,311	314	1	100	222	.....	202
.....	.....	.....	.....	375	156	25,996	704	228	215	8,052	.....	203
.....	6,333	.....	.....	.....	282	67,226	957	2	529	6,966	.....	204
.....	.....	.....	.....	.....	.....	1,282	240	26	43	33	9	205
.....	.....	.....	.....	.....	21	13,453	510	81	122	2,956	.....	206
.....	.....	.....	.....	.....	.....	10,263	401	77	183	2,073	.....	207
.....	.....	.....	.....	100	176	26,315	860	33	381	4,821	.....	208
2,500	.....	.....	.....	.....	215	21,692	824	20	341	3,760	.....	209
.....	.....	.....	.....	.....	3	9,227	475	3	159	1,531	.....	210
.....	.....	.....	.....	.....	.....	14,161	753	3	233	1,934	.....	211
.....	.....	.....	.....	.....	602	1,785	216	.....	87	53	921	212

*Chiefly from sale of cement.

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Township Municipalities.	Disbursements, 1907.—*Continued.*						
	Board of Health.	Support of the poor and other charities.	County Treasurer for levies.	Payment on account of schools and education.	Drainage works.	Sinking Fund investments and deposits.	Other investments and deposits.
	$	$	$	$	$	$	$
160. Emo	.....	.....	.....	2,305	.....	.....	.....
161. Enniskillen	184	709	4,624	13,540	12,560	.....	.....
162. Ennismore	41	35	1,321	2,015	.....	.....	.....
163. Eramosa	126	95	3,269	8,408	.....	.....	.....
164. Erin	28	8	4,052	8,937	.....	.....	.....
165. Ernestown	17	170	3,999	9,458	.....	.....	475
166. Escott Front	176	132	933	3,300	.....	.....	.....
167. Esquesing	95	429	4,119	9,660	.....	.....	.....
168. Essa	28	132	5,107	8,084	.....	.....	.....
169. Etobicoke	426	77	4,063	13,757	.....	7	208
170. Euphemia	75	46	1,940	4,912	519	.....	.....
171. Euphrasia	88	197	2,364	9,445	.....	.....	.....
172. Evanturel	10	5	.....	990	.....	.....	.....
173. Faraday	.....	104	14	1,647	.....	.....	.....
174. Fenelon	.....	5	2,999	5,640	.....	.....	.....
175. Ferris	.....	20	.....	1,693	.....	.....	.....
176. Finch	18	138	1,798	8,464	545	.....	.....
177. Fitzroy	35	31	1,000	3,756	.....	.....	.....
178. Flamboro E.	93	514	4,885	5,370	.....	.....	.....
179. Flamboro W	128	674	4,410	5,951	.....	.....	216
180. Flos	41	80	4,699	8,915	229	150	.....
181. Foley	63	49	.....	818	.....	.....	.....
182. Fredericksburg N.	24	367	2,376	4,251	.....	.....	.....
183. Fredericksburg, S.	.....	36	3,450	3,458	.....	.....	.....
184. Fullarton	75	75	3,827	4,729	412	.....	.....
185. Gainsborough	28	.....	2,000	6,531	.....	.....	.....
186. Galway and Cavendish	....	16	281	1,370	.....	.....	.....
187. Garafraxa E.	41	5	2,016	6,311	.....	.....	.....
188. Garafraxa W	118	8	3,309	6,940	173	.....	.....
189. Georgina	15	10	1,564	3,776	.....	.....	.....
190. Glamorgan	24	.....	100	959	.....	.....	.....
191. Glanford	29	159	3,341	3,381	.....	.....	153
192. Glenelg	23	9	1,382	8,204	.....	.....	.....
193. Gloucester	385	25	3,204	14,330	501	.....	.....
194. Goderich	325	67	3,598	4,790	.....	.....	.....
195. Gordon	4	20	.....	1,350	.....	.....	.....
196. Gosfield N.	49	186	2,081	6,120	4,413	.....	.....
197. Gosfield S.	9	54	2,734	7,399	1,478	.....	.....
198. Goulbourn	8	73	2,769	5,920	.....	.....	.....
199. Gower N.	33	127	1,986	5,149	8,160	.....	.....
200. Gower S.	82	.....	977	1,912	17	.....	.....
201. Grantham	15	28	3,045	5,417	.....	.....	.....
202. Grattan	20	.....	.....	3,332	.....	.....	.....
203. Greenock	233	.....	3,212	6,613	51	.....	237
204. Grey	538	10	4,327	7,666	6,206	.....	20,990
205. Griffith and Matawatchan	5	.....	70	717	.....	.....	.....
206. Grimsby N.	19	47	6,285	2,263	.....	.....	.....
207. Grimsby S.	21	.....	1,418	4,724	.....	.....	.....
208. Guelph	157	130	3,123	4,817	.....	.....	4,850
209. Gwillimbury E.	161	135	3,439	12.056	.....	.....	.....
210. Gwillimbury N.	10	45	1,834	3,690	.....	.....	.....
211. Gwillimbury W.	9	285	3,786	6,830	.....	.....	.....
212. Hagar	.....	8	.....	97	.....	.....	.....

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Disbursements, 1907.—*Continued.*								Assets on December 31, 1907			
School debentures redeemed.	Drainage debentures redeemed.	All other debentures redeemed.	Refund of moneys borrowed for current expenses.	Interest on loans, advances and debentures.	Discount on debentures sold.	Miscellaneous.	Total disbursements.	Cash in treasury.	Taxes in arrears.	Sinking Fund investments and deposits.	No.
$	$	$	$	$	$	$	$	$	$	$	
169	.....	.....	708	72	.....	197	5,036	353	4,751	.....	160
323	7,147	.....	.....	1,274	174	440	56,051	1,215	40,897	.....	161
.....	.....	.....	300	8	.....	55	5,081	116	221	.....	162
.....	.....	.....	.....	6	.....	60	15,248	2,774	3,255	.....	163
320	.....	.....	.....	43	.....	142	16,689	10	2,404	.....	164
.....	.....	.....	2,240	14	.....	271	23,036	10	7,809	.....	165
.....	.....	.....	500	15	.....	30	7,145	133	97	.....	166
.....	.....	.....	135	99	.....	580	26,152	524	1,040	.....	167
167	.....	.....	4,020	136	.....	130	25,598	4,272	1,301	.....	168
1,050	.....	686	8,000	860	350	99	54,944	14,337	.....	246	169
.....	745	1,206	.....	558	.....	69	14,301	1,694	6,700	.....	170
.....	.....	.....	.....	.....	.....	51	15,725	2,610	1,446	.....	171
.....	.....	.....	.....	11	.....	.....	2,117	143	4,571	.....	172
92	.....	.....	191	136	.....	21	2,884	148	2,687	.....	173
330	.....	.....	1,942	129	.....	147	13,913	630	2,916	.....	174
98	.....	.....	69	23	.....	34	2,855	1,182	2,774	.....	175
205	4,441	1,630	5,250	2,641	.....	1,096	33,889	.....	6,803	.....	176
.....	.....	.....	.....	.....	.....	54	9,617	162	10,090	.....	177
.....	.....	.....	1,930	15	.....	248	17,656	.....	4,730	.....	178
.....	376	.....	300	94	.....	135	17,642	2,350	.....	.....	179
175	569	1,541	.....	887	.....	33	23,277	4,565	3,144	2,011	180
.....	.....	.....	.....	.....	.....	54	2,023	1,097	480	.....	181
.....	.....	.....	2,500	35	.....	4	11,808	412	2,453	.....	182
.....	.....	.....	.....	2	.....	56	8,055	62	2,560	.....	183
.....	.....	.....	3,700	145	.....	102	20,014	1,572	189	.....	184
.....	.....	.....	1,866	29	.....	408	14,941	14	1,863	.....	185
.....	.....	.....	.....	.....	.....	5	1,955	302	371	.....	186
.....	.....	565	1,500	79	.....	19	14,085	1,608	911	.....	187
138	.....	.....	3,000	75	.....	85	21,878	1,019	955	.....	188
.....	.....	.....	900	26	.....	41	9,129	.....	37	.....	189
66	.....	.....	209	10	.....	330	2,158	33	.....	.....	190
.....	.....	.....	100	32	.....	162	8,583	1,198	1,120	.....	191
45	.....	.....	500	81	.....	10	13,505	2,297	.....	.....	192
374	888	142	11,200	787	.....	50	43,688	166	30,720	.....	193
316	.....	.....	3,877	122	.....	184	16,852	240	82	.....	194
93	.....	.....	63	94	.....	17	2,984	362	1,015	.....	195
387	6,008	.....	.....	1,942	88	1,096	29,150	4	14,078	.....	196
.....	3,367	1,141	13,000	842	.....	1,171	40,138	24	14,920	.....	197
.....	.....	.....	6,309	300	.....	175	20,287	2,104	2,551	.....	198
.....	808	.....	.....	188	.....	149	18,368	1,792	415	.....	199
.....	98	.....	500	71	.....	23	4,489	.....	943	.....	200
.....	.....	.....	.....	.....	.....	196	14,527	784	995	.....	201
.....	.....	.....	.....	.....	.....	17	4,006	1,305	2,696	.....	202
.....	.....	342	4,986	454	.....	387	25,714	282	255	.....	203
.....	2,958	1,223	4,671	3,721	501	251	61,516	5,710	1,237	.....	204
.....	.....	.....	.....	.....	.....	93	1,236	46	321	.....	205
117	177	.....	.....	187	.....	668	13,432	21	1,439	.....	206
93	.....	317	400	220	.....	70	9,997	266	29	.....	207
.....	.....	.....	7,620	80	.....	43	26,315	.....	9,076	.....	208
.....	.....	62	536	85	.....	255	21,674	18	205	.....	209
500	.....	.....	784	90	.....	106	9,227	.....	58	.....	210
.....	.....	.....	.....	.....	.....	267	14,100	61	1,268	.....	211
.....	.....	.....	150	6	.....	78	1,616	169	350	.....	212

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Township Municipalities.	Assets on 31st December, 1907.—*Continued.*			
	All other investments and deposits.	Other property.	Miscellaneous.	Total assets.
	$	$	$	$
160. Emo	.....	1,300	1,614	8,018
161. Enniskillen	.....	1,000	4,890	48,002
162. Ennismore	.....	1,200	.....	1,537
163. Eramosa	.....	.....	3	6,032
164. Erin	.....	.....	640	3,054
165. Ernestown	23,255	2,150	613	33,837
166. Escott Front	.....	600	.....	830
167. Esquesing	38,988	250	.....	40,802
168. Essa	.....	.....	750	6,323
169. Etobicoke	13,300	1,232	25,732	54,847
170. Euphemia	.....	800	353	9,547
171. Euphrasia	.....	1,000	.....	5,056
172. Evanturel	.....	.....	.....	4,714
173. Faraday	.....	.....	613	3,448
174. Fenelon	.....	.....	1,993	5,539
175. Ferris	.....	240	291	4,487
176. Finch	.....	800	3,700	11,303
177. Fitzroy	.....	1,400	65	11,717
178. Flamboro E.	.....	1,750	.....	6,480
179. Flamboro W.	15,570	4,500	.....	22,420
180. Flos	.....	14,110	3,370	27,200
181. Foley	.....	100	172	1,849
182. Fredericksburg N.	3,500	400	.....	6,765
183. Fredericksburg S.	1,381	800	.....	4,803
184. Fullarton	.....	800	.....	2,561
185. Gainsborough	.....	400	184	2,461
186. Galway and Cavendish	.....	.....	.....	673
187. Garafraxa E.	.....	.....	.....	2,519
188. Garafraxa W.	.....	750	1,055	3,779
189. Georgina	.....	140	111	288
190. Glamorgan	.....	.....	.....	33
191. Glanford	7,153	3,835	.....	13,306
192. Glenelg	.....	2,000	1,455	5,752
193. Gloucester	.....	6,950	4,397	42,233
194. Goderich	.....	.....	.....	32
195. Gordon	400	.....	667	2,444
196. Gosfield N.	.....	2,800	4,606	21,488
197. Gosfield S.	.....	.....	3,084	18,028
198. Goulbourn	7,691	200	250	12,796
199. Gower N.	1,801	1,500	200	5,708
200. Gower S.	.....	.....	.....	943
201. Grantham	.....	.....	58	1,837
202. Grattan	.....	400	25	4,426
203. Greenock	237	.....	.....	774
204. Grey	20,990	1,140	359	29,136
205. Griffith and Matawatchan	.....	.....	.....	367
206. Grimsby N.	.....	1,250	308	3,018
207. Grimsby S.	.....	200	1,086	1,581
208. Guelph	14,000	.....	220	23,295
209. Gwillimbury E.	12,974	50	2,500	15,747
210. Gwillimbury N.	.....	.....	1,000	1,058
211. Gwillimbury W.	.....	.....	.....	1,329
212. Hagar	.....	1,000	150	1,669

MUNICIPALITIES, FOR THE YEAR, 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Liabilities on December 31, 1907.										
County levy.	Local school rates.	Railway debentures.	School debentures.	Drainage debentures.	All other debentures.	Loans for current expenses and interest.	Due Sinking Fund.	Miscellaneous.	Total liabilities.	No.
$	$	$	$	$	$	$	$	$	$	
.....	2,162	.....	1,612	.....	.....	753	.....	106	4,633	160
.....	2,431	.....	2,377	37,562	.....	.....	.....	958	43,328	161
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	162
.....	3,984	.....	.....	.....	.....	.....	.....	1,152	5,136	163
.....	.....	.....	640	.....	.....	.....	.....	202	842	164
7,004	.....	.....	.....	.....	.....	1,260	.....	.....	8,264	165
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	166
.....	.....	.....	.....	.....	.....	1,788	.....	.....	1,788	167
5,108	286	.....	750	.....	.....	.....	.....	433	6,577	168
.....	1,310	.....	25,688	.....	9,437	.....	.....	645	37,080	169
2,134	910	.....	.....	1,350	5,869	.....	.....	1,161	11,424	170
.....	.....	.....	.....	.....	.....	.....	.....	110	110	171
.....	.....	.....	.....	.....	.....	899	.....	88	987	172
220	1,718	.....	550	.....	2,700	.....	.....	24	5,212	173
.....	2,240	.....	1,993	.....	.....	.....	.....	250	4,483	174
.....	2,155	.....	291	.....	.....	.....	.....	.....	2,446	175
2,337	.....	.....	925	25,522	8,370	398	.....	2,646	40,198	176
1,594	4,235	.....	.....	.....	.....	.....	.....	.....	5,829	177
.....	4,237	.....	.....	.....	.....	.....	.....	101	4,338	178
.....	.....	.....	.....	1,275	.....	938	.....	.....	2,213	179
.....	2,347	10,679	2,948	7,347	2,930	.....	.....	.....	26,251	180
.....	814	.....	.....	.....	.....	.....	.....	... ...	814	181
1,874	2,715	.....	.....	.....	.....	.....	.....	.....	4,589	182
1,893	.....	.....	.....	.....	.....	1,381	.....	.....	3,274	183
.....	.....	.....	.....	.....	.....	1,000	.....	.....	1,000	184
625	.....	.....	.....	.....	.....	.....	.....	466	1,091	185
.....	951	.....	.....	.....	.....	.....	.....	164	1,115	186
.....	.....	.....	.....	.....	1,163	.....	.....	.....	1,163	187
.....	.....	.....	919	.....	.....	.....	.....	497	1,416	188
.....	.....	.....	.....	.....	.....	.....	.....	150	150	189
236	855	.....	.....	.....	.....	467	.....	.....	1,558	190
.....	153	.....	.....	.....	.....	700	.....	131	984	191
.....	.....	.....	1,455	.....	.....	.....	.....	.....	1,455	192
4,661	12,582	.....	3,881	2,846	2,144	5,040	.....	.....	31,154	193
.....	.....	.....	.....	.....	.....	1,050	.....	45	1,095	194
.....	200	.....	667	.....	.....	200	.....	4	1,071	195
2,081	1,423	.....	3,107	37,813	.....	2,000	.....	1,403	47,827	196
.....	564	.....	1,800	16,184	.....	9,450	.....	1,423	29,421	197
2,769	350	.....	.....	.....	.....	566	.....	98	3,783	198
.....	.....	.....	.....	8,525	.....	.....	.....	613	9,138	199
.....	.....	.....	.....	1,101	.....	288	.....	.....	1,389	200
.....	546	.....	.....	.....	.....	.....	.....	1,260	1,806	201
610	.....	.....	.....	.....	.....	.....	.....	.....	610	202
.....	.....	.....	.....	.....	9,490	4,000	.....	237	13,727	203
.....	.....	4,657	.....	60,933	27,945	.....	.....	90	93,625	204
.....	80	.....	.....	.....	453	.....	.....	54	587	205
.....	.....	.....	123	998	.....	1,681	.....	38	2,840	206
.....	.....	1,049	1,086	.....	.....	.....	.....	.....	2,135	207
.....	.....	.....	.....	.....	.....	8,190	.....	176	8,366	208
.....	.....	.....	2,500	.....	900	1,851	.....	.....	5,251	209
.....	.....	.....	1,000	.....	.....	532	.....	.....	1,532	210
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	211
.....	267	.....	.....	.....	.....	.....	.....	.....	267	212

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Township Municipalities and Counties in which located.	Receipts, 1907. Balance from 1906.	Municipal and school taxes.	Licenses.	Fees, rents, fines, etc.	Interest and dividends.	Refund of money invested.	Borrowed for current expenses.
	$	$	$	$	$	$	$
213. Hagarty, Jones, etc., Renfrew ..	633	6,278	315	46	.....	.....	51
214. Hagerman, Parry Sound.....	286	1,418	42	17	.....	.....	.....
215. Haldimand, Northumberland...	15	20,351	....	85	22	.....	8,000
216. Hallam, Sudbury	266	930	....	38	.....	.....	.....
217. Hallowell, Prince Edward.....	494	13,785	....	14	13	.....	.....
218. Hamilton, Northumberland.....	1,604	17,616	216	2	36	.....	3,000
219. Hanmer, Sudbury.....	319	2,212	...	92	.....	.....	613
220. Harley, Nipissing.....	433	2,011	....	24	.....	.....	.....
221. Harvey, Peterborough.....	1,171	3,935	....	1	.....	.....	280
222. Harwich, Kent.....	5,617	37,938	94	5	80	.....	6,952
223. Hawkesbury, E., Prescott.....	62	16,375	324	4	.....	.....	492
224. Hawkesbury, W., Prescott.....	1,539	12,315	....	70	.....	.....	.....
225. Hay, Huron.....	167	19,860	144	36	12	.....	1,761
226. Head, Clara and Maria, Renfrew	148	1,221	162	.....	.....	.....	.....
227. Hibbert, Perth	4,602	18,162	193	12	64	.....	.....
228. Hillier, Prince Edward.....	.....	12,058	45	9	16	.....	4,215
229. Hilton, Algoma.....	1,059	2,026	50	8	10	.....	.....
230. Himsworth, N., Parry Sound...	399	2,570	130	.....	.....	.....	.....
231. Himsworth, S., Parry Sound....	795	3,673	84	8	.....	.....	500
232. Hinchinbrooke, Frontenac	709	5,692	88	8	.....	.....	.....
233. Holland, Grey	2,133	12,724	48	16	.....	.....	.....
234. Hope, Durham	.....	21,423	....	.....	1,572	.....	1,500
235. Horton, Renfrew.....	5,714	5,162	.....	.....	198	160	.....
236. Houghton, Norfolk	361	9,177	45	12	.....	.....	700
237. Howard, Kent	9,496	26,876	45	2	345	.....	.....
238. Howe Island, Frontenac.....	4	1,729	....	.....	.....	.....	.....
239. Howick, Huron.....	6,747	27,942	198	88	573	6,595	10,800
240. Howland, Bid. & Sheg., Manitoulin	511	3,466	72	33	.....	.....	.....
241. Hudson, Nipissing	233	1,091	....	.....	.....	.....	1,000
242. Hullett, Huron.....	33	21,146	....	7	169	5,021	2,000
243. Humberstone, Welland	5,194	12,961	469	46	122	.....	.....
244. Humphrey, Parry Sound.....	577	3,250	104	25	.....	.....	.....
245. Hungerford, Hastings	1,726	14,389	47	223	.....	.....	.....
246. Huntingdon, Hastings.....	44	10,846	....	.....	7	.....	18
247. Huntley, Carleton.....	1,526	11,555	....	.....	3	300	1,700
248. Huron, Bruce.....	.....	18,522	....	8	46	101	1,049
249. Innisfil, Simcoe.....	1,222	21,749	....	32	112	72	.....
250. Jocelyn, Algoma.....	482	2,077	....	.....	.....	.....	.....
251. Johnson, Tarbutt, etc., Algoma.	820	4,643	....	.....	.....	.....	.....
252 Joly, Parry Sound.....	183	1,013	....	.....	.....	.....	.....
253. Kaladar & Anglesea, Len'x & Ad.	197	3,104	40	17	.....	.....	.....
254. Kennebec, Frontenac.....	270	3,723	41	21	.....	.....	.....
255. Kenyon, Glengarry.....	1,363	20,695	369	23	.....	5	1,167
256. Keppel, Grey.....	4,052	15,981	....	2	149	250	1,500
257. Kerns, Nipissing	858	2,006	....	.....	.....	.....	300
258. Kincardine, Bruce	1,331	15,729	48	.....	39	.....	1,550
259. King, York.....	718	30,202	260	4	1,800	330	2,000
260. Kingston, Frontenac	7,553	16,145	20	.....	136	.....	.....
261. Kinloss, Bruce.....	2,424	10,587	51	.....	39	.....	.....
262. Kitley, Leeds.....	1,239	11,835	158	.....	13	97	.....
263. Korah, Algoma.....	578	4,945	4	.....	.....	150	.....
264. Laird, Algoma	1,065	1,707	....	.....	.....	.....	.....
265. Lanark, Lanark.....	1,273	8,807	....	.....	.....	.....	1,550

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Receipts, 1907.—*Continued.*							Disbursements, 1907.					
Borrowed on debentures for schools.	Borrowed on debentures for drainage.	Borrowed on debentures for other purposes.	Premiums on debentures sold.	County Grants.	Miscellaneous.	Total receipts.	Allowances, salaries and commissions.	Law costs.	Other expenses of municipal government.	Roads and bridges.	Buildings and other works.	No.
$	$	$	$	$	$	$	$	$	$	$	$	
.....	.....	.....	....	.....	267	7,590	641	.....	316	944	.....	213
.....	.....	.....	....	.....	228	1,991	252	1	63	80	125	214
.....	.....	.....	....	.....	63	28,536	1,046	11	434	5,010	45	215
.....	.....	.....	....	.....	*2,444	3,678	263	6	51	274	.....	216
.....	.....	.....	....	.....	†1,763	16,069	469	53	275	1,611	.....	217
.....	.....	.....	....	10	123	22,607	984	60	455	3,425	407	218
.....	.....	.....	....	.....	.....	3,236	501	.....	187	414	63	219
.....	.....	.....	....	.....	5	2,473	296	3	187	272	.....	220
.....	.....	.....	....	84	102	5,573	466	5	165	508	30	221
2,000	1,264	.....	16	500	1,050	55,516	2,254	10	629	8,013	.....	222
.....	.....	.....	....	.....	2	17,259	463	.....	227	1,487	280	223
.....	.....	.....	....	.....	661	14,585	445	.....	122	1,664	.....	224
.....	.....	.....	....	39	55	22,074	687	41	413	5,465	.....	225
.....	.....	.....	....	22	.....	1,553	310	27	65	4	.....	226
2,000	.....	2,635	....	399	841	28,908	809	63	257	6,120	.....	227
.....	.....	.....	...	200	749	17,292	391	10	100	1,006	.....	228
1,800	.....	.....	....	.....	.....	4,953	251	1	132	105	180	229
.....	.....	.....	....	.....	5	3,104	274	7	79	431	.....	230
.....	.....	.....	....	.....	141	5,201	521	31	80	461	.....	231
.....	.....	.....	....	.....	19	6,516	347	22	98	969	.....	232
.....	.....	.....	....	.....	2	14,923	743	54	210	2,166	.....	233
.....	.....	.....	....	.....	162	24,657	943	217	322	3,338	.....	234
.....	.....	.....	....	.....	20	11,254	305	.....	137	5,925	.....	235
.....	.....	.....	....	.....	43	10,338	610	28	237	1,544	.....	236
3,000	6,872	.....	40	150	502	47,328	1,150	128	434	6,700	.....	237
.....	.....	.....	....	.....	.....	1,733	109	.....	32	152	.....	238
.....	.....	.....	....	.....	343	53,286	991	50	831	5,375	.....	239
.....	.....	.....	....	.....	518	4,600	301	.....	72	1,154	75	240
.....	.....	.....	....	.....	‡2,000	4,324	214	.....	74	3,022	.....	241
.....	.....	.....	....	18	430	28,824	817	.....	234	6,844	....	242
3,310	2,624	.....	....	.....	442	25,168	797	50	401	2,864	747	243
.....	.....	.....	....	.....	101	4,057	357	.....	117	771	116	244
.....	.....	.....	....	.....	.....	16,385	719	40	330	592	48	245
.....	.....	.....	....	.....	12	10,927	566	2	212	491	.....	246
.....	.....	.....	....	10	87	15,181	666	28	121	2,654	.....	247
.....	.....	.....	....	427	238	20,391	909	2	359	5,397	.....	248
.....	2,200	.....	....	.....	212	25,599	1,138	.....	513	4,009	.....	249
.....	.....	.....	....	.....	.....	2,559	247	.....	46	523	.....	250
.....	.....	.....	....	.....	1	5,464	489	18	65	778	.....	251
.....	.....	.....	....	.....	31	1,227	235	72	95	121	.....	252
.....	.....	.....	....	38	277	3,673	366	1	120	507	.....	253
.....	.....	.....	....	.....	10	4,065	295	.....	99	176	197	254
.....	.....	.....	....	.....	.....	23,622	683	39	447	7,455	.....	255
.....	.....	.....	....	.....	22	21,956	947	21	332	2,854	132	256
.....	.....	.....	6	.....	46	3,216	343	.....	53	759	45	257
.....	.....	.....	....	321	308	19,326	724	16	268	3,342	.....	258
.....	.....	.....	....	.....	651	35,965	1,479	1,603	425	7,186	.....	259
.....	.....	.....	....	.....	1	23,855	775	21	290	2,262	.....	260
.....	.....	.....	....	247	93	13,441	627	.....	131	2,697	....	261
.....	.....	.....	....	.....	.....	13,342	553	6	157	2,309	430	262
.....	.....	.....	....	.....	342	6,019	638	29	135	802	.....	263
.....	.....	.....	....	.....	.....	2,772	229	.....	99	472	.....	264
.....	.....	.....	....	.....	50	11,680	473	.....	161	553	.....	265

*Including $2,408 contra on School debentures assumed by town of Webbwood. See payment on page 29.
†Including $1,588 from village of Bloomfield on separation. ‡From Legislature for roads.

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Disbursements, 1907.—*Continued.*

Township Municipalities.	Board of Health.	Support of the poor and other charities.	County Treasurer for levies.	Payment on account of schools and education.	Drainage works.	Sinking Fund investments and deposits.	Other investments and deposits.
	$	$	$	$	$	$	$
213. Hagarty	421	43	734	4,114	.....	37	.....
214. Hagerman	10	5	.....	1,309	.....	.....	.....
215. Haldimand	187	97	3,906	9,219	.....	.....	.....
216. Hallam	.....	.....	.....	125	.....	.....	.....
217. Hallowell	100	74	5,072	6,690	.....	.....	.....
218. Hamilton	102	16	4,576	7,766	.....	.....	.....
219. Hanmer	.....	.....	.....	1,571	33	.....	.....
220. Harley	2	.....	.....	1,154	.....	.....	.....
221. Harvey	31	20	592	3,389	.....	.....	.....
222. Harwich	520	492	.....	15,767	2,807	.....	.....
223. Hawkesbury, E.	138	10	3,672	9,433	.....	.....	.....
224. Hawkesbury, W.	16	127	1,191	4,919	40	.....	.....
225. Hay	278	10	3,932	8,454	193	.....	.....
226. Head, Clara and Maria	.....	5	117	689	.....	.....	.....
227. Hibbert	38	70	3,922	8,005	1,908	.....	.....
228. Hillier	47	169	3,450	5,324	.....	.....	.....
229. Hilton	4	5	.....	2,454	.....	.....	.....
230. Himsworth, N.	64	5	.....	1,355	.....	.....	.....
231. Himsworth, S.	37	5	.....	3,468	.....	.....	.....
332. Hinchinbrooke	24	45	1,056	2,608	.....	.....	.....
233. Holland	105	46	2,189	6,932	.....	.....	.....
234. Hope	34	30	4,688	8,580	.....	.....	.....
235. Horton	.....	55	1,073	2,877	.....	.....	10
236. Houghton	18	147	1,220	4,116	127	.....	.....
237. Howard	93	407	3,993	12,278	10,092	.....	.....
238. Howe Island	.....	.....	.....	1,190	.....	.....	.....
239. Howick	73	87	11,634	9,993	423	50	.....
240. Howland, Bidwell and Sheg.	19	15	.....	2,306	.....	.....	.....
241. Hudson	22	5	.....	299	.....	.....	.....
242. Hullett	21	10	3,905	7,771	40	.....	1,690
243. Humberstone	76	24	2,505	9,169	1,629	.....	4,122
244. Humphrey	8	98	.....	1,383	.....	.....	.....
245. Hungerford	120	166	4,471	9,361	.....	.....	.....
246. Huntingdon	28	88	3,994	5,325	.....	.....	.....
247. Huntley	39	11	2,041	5,778	.....	.....	300
248. Huron	64	8	4,171	8,394	14	.....	266
249. Innisfil	310	283	5,640	8,301	660	.....	.....
250. Jocelyn	.....	.....	.....	1,050	72	56	.....
251. Johnson	3	113	.....	2,181	.....	.....	.....
252. Joly	.....	5	.....	360	.....	.....	.....
253. Kaladar and Anglesea	58	16	251	2,006	.....	.....	.....
254. Kennebec	19	162	868	1,853	.....	.....	.....
255. Kenyon	233	107	2,526	10,572	329	.....	.....
256. Keppel	519	299	1,427	7,767	119	486	.....
257. Kerns	5	.....	.....	1,145	.....	.....	.....
258. Kineardine	127	11	3,673	7,363	.....	.....	.....
259. King	258	286	6,377	15,800	.....	.....	.....
260. Kingston	43	113	7,046	7,452	156	.....	.....
261. Kinloss	20	30	2,760	4,728	.....	.....	.....
262. Kitley	332	15	1,982	6,411	24	.....	96
263. Korah	4	69	.....	1,585	.....	.....	.....
264. Laird	5	80	.....	1,344	.....	.....	.....
265. Lanark	13	16	2,189	4,691	.....	.....	.....

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Disbursements, 1907.—*Continued.*								Assets on Dec. 31, 1907			
School debentures redeemed.	Drainage debentures redeemed.	All other debentures redeemed.	Refund of moneys borrowed for current expenses.	Interest on loans, advances and debentures.	Discount on debentures sold.	Miscellaneous.	Total disbursements.	Cash in treasury.	Taxes in arrears.	Sinking Fund investments and deposits.	No.
$	$	$	$	$	$	$	$	$	$	$	
84	.....	.....	.....	153	.....	103	7,590	.....	1,810	1,149	213
.....	.....	.....	.....	.....	.....	5	1,850	141	1,149	.....	214
.....	.....	.....	8,000	222	.....	350	28,527	9	182	.....	215
2,408	.....	.....	.....	.....	.....	70	3,197	481	433	.....	216
200	.....	.....	.....	218	.....	60	14,822	1,247	61	.....	217
.....	.....	.....	3,000	35	.....	331	21,157	1,450	2,249	.....	218
97	.....	.....	200	56	.....	.....	3,122	114	1,921	.....	219
.....	.....	.....	200	.....	.....	.....	2,114	359	1,965	.....	220
100	.....	67	.....	111	.....	89	5,573	.....	2,542	.....	221
942	6,179	.....	6,952	1,594	.....	515	46 674	8,842	6,938	.....	222
53	.....	.....	500	119	.....	40	16,422	837	1,546	.....	223
331	78	1,056	2,000	461	.....	6	12,456	2,129	.....	.....	224
.....	428	.....	1,761	57	.....	194	21,913	161	762	.....	225
26	.....	.....	.....	15	.....	17	1,275	278	1,020	.....	226
.....	2,893	.....	.....	709	.....	36	24,830	4,078	.....	.....	227
.....	.....	.....	5,843	39	.....	432	16,811	481	286	.....	228
.....	.....	.....	60	50	.....	28	3,270	1,683	345	413	229
.....	.....	.....	.....	2	.....	149	2,366	738	703	.....	230
177	.....	.....	.....	116	.....	251	5,147	54	1,651	.....	231
.....	.....	.....	.....	.....	.....	64	5,233	1,283	233	.....	232
.....	.....	.....	.....	.....	.....	38	12,483	2,440	548	.....	233
.....	.....	690	3,032	193	.....	529	22,596	2,061	3,447	.....	234
.....	.....	.....	.....	.....	.....	22	10,414	840	1,351	.....	235
.....	.....	172	1,017	88	.....	134	9,456	882	1,519	.....	236
337	4,870	.....	.....	729	.....	485	41,696	5,632	4,200	.....	237
.....	.....	.....	16	.....	.....	31	1,530	203	302	.....	238
533	.....	8,439	10,800	1,805	.....	186	51,270	2,016	447	6,460	239
.....	.....	.....	.....	.....	.....	52	3,994	606	254	.....	240
.....	.....	.....	600	.....	.....	.....	4,236	88	869	.....	241
92	808	140	2,000	341	.....	*4,100	28,813	11	.....	.....	242
.....	820	.....	.....	108	.....	106	23,418	1,750	930	.....	243
.....	.....	.....	600	22	.....	.....	3,472	585	1,688	.....	244
276	.....	.....	.....	87	.....	130	16,340	45	5,629	.....	245
154	.....	.....	.....	59	.....	8	10,927	.....	4,645	.....	246
142	.....	550	1,700	416	.....	251	14,697	484	2,762	.....	247
427	.....	.....	80	62	.....	238	20,391	.....	3,590	.....	248
618	884	.....	.....	347	.....	20	22,723	2,876	2,232	.....	249
177	.....	.....	.....	102	.....	16	2,289	270	456	579	250
391	.....	.....	.....	562	.....	27	4,627	837	1,388	.....	251
.....	.....	.....	.....	.....	.....	25	913	314	462	.....	252
.....	.....	.....	.....	5	.....	215	3,545	128	1,736	.....	253
.....	.....	.....	.....	.....	.....	5	3,674	391	3,251	.....	254
.....	546	.....	.....	466	.....	219	23,622	.....	9,068	.....	255
190	363	60	1,500	546	.....	228	17,790	4,166	2,005	2,427	256
234	.....	.....	300	74	.....	.....	2,958	258	2,348	.....	257
706	.....	.....	1,550	337	.....	184	18,301	1,025	206	.....	258
.....	.....	.....	2,000	142	.....	300	35,856	109	1,421	.....	259
.....	.....	.....	.....	.....	.....	197	18,355	5,500	5,153	.....	260
280	.....	.....	.....	70	.....	55	11,398	2,043	4	.....	261
.....	.....	.....	.....	9	.....	87	12,411	931	60	.....	262
.....	.....	.....	2,095	54	.....	586	5,997	22	11,718	.....	263
140	.....	.....	.....	31	.....	84	2,484	288	233	.....	264
.....	.....	.....	2,379	81	.....	15	10,571	1,109	304	.....	265

*Including $1,000 bonus to G. T. Railway.

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS

Township Municipalities.	Assets on December 31, 1907.—*Continued.*			
	All other investments and deposits.	Other property.	Miscellaneous.	Total Assets.
	$	$	$	$
213. Hagarty	1,000	40	.....	3,999
214. Hagerman	.....	1,385	.....	2,675
215. Haldimand	.....	3,850	30	4,071
216. Hallam	.....	280	.....	1,194
217. Hallowell	.....	3,075	4,923	9,306
218. Hamilton	.....	2,400	285	6,384
219. Hanmer	.....	.....	326	2,361
220. Harley	.....	660	765	3,749
221. Harvey	.....	.....	.....	2,542
222. Harwich	.....	2,800	6,234	24,814
223. Hawkesbury, E.	.....	1,250	455	4,088
224. Hawkesbury, W.	.....	3,300	2,495	7,924
225. Hay	.....	1,940	500	3,363
226. Head, Clara and Maria	.....	.....	227	1,525
227. Hibbert	.....	1,000	2,000	7,078
228. Hillier	.....	2,000	.....	2,767
229. Hilton	.....	900	2,390	5,731
230. Himsworth, N.	.....	.....	731	2,172
231. Himsworth, S.	.....	50	1,783	3,538
232. Hinchinbrook	.....	1,000	.....	2,516
233. Holland	.....	680	.....	3,668
234. Hope	30,840	350	.....	36,698
235. Horton	820	1,275	25	4,311
236. Houghton	.....	1,725	1,493	5,619
237. Howard	.....	1,500	9,198	20,530
238. Howe Island	.....	.....	.....	505
239. Howick	.....	2,630	6,744	18,297
240. Howland, Bidwell and Sheg	.....	350	40	1,250
241. Hudson	.....	.....	.....	957
242. Hullett	1,690	.....	408	2,109
243. Humberstone	4,122	2,900	7,912	17,614
244. Humphrey	.....	908	.....	3,181
245. Hungerford	.....	4,000	1,903	11,577
246. Huntingdon	.....	500	849	5,994
247. Huntley	.....	1,300	7,721	12,267
248. Huron	165	2,100	823	6,678
249. Innisfil	335	.....	894	6,337
250. Jocelyn	.....	1,250	1,423	3,978
251. Johnson	.....	100	2,159	4,484
252. Joly	.....	25	.....	801
253. Kaladar and Anglesea	.....	350	10	2,224
254. Kennebec	.....	600	.....	4,242
255. Kenyon	.....	1,500	431	10,999
256. Keppel	.....	520	3,750	12,868
257. Kerns	.....	.....	1,051	3,657
258. Kincardine	.....	700	6,328	8,259
259. King	38,951	1,975	243	42,699
260. Kingston	1,650	.....	1,698	14,001
261. Kinloss	.....	600	1,462	4,109
262. Kitley	96	2,000	.....	3,087
263. Korah	.....	425	200	12,365
264. Laird	.....	235	396	1,152
265. Lanark	.....	2,225	.....	3,638

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Liabilities on December 31, 1907.										
County levy.	Local school rates	Railway debentures.	School debentures.	Drainage debentures.	All other debentures.	Loans for current expenses and interest.	Due Sinking Fund.	Miscellaneous.	Total liabilities.	No.
$	$	$	$	$	$	$	$	$	$	
.....	.....	2,000	.....	1,100	.....	51	.....	.....	3,151	213
.....	753	.....	.....	.....	.....	.....	.....	550	1,303	214
.....	.....	.....	.....	.....	.....	.....	.....	180	180	215
.....	473	.....	.....	.....	.....	.....	.....	63	536	216
.....	.....	.....	4,923	.....	.....	.....	.....	.....	4,923	217
.....	.....	.....	.....	.....	.....	.....	.....	100	100	218
.....	853	.....	326	.....	.....	613	.....	.....	1,792	219
.....	427	.....	600	.....	.....	.....	.....	42	1,069	220
542	.....	2,578	.....	.....	.....	280	.....	200	3,600	221
6,077	.....	.....	4,458	23,844	.....	.....	.....	246	34,625	222
.....	.....	.....	455	.....	.....	1,700	.....	1,197	3,352	223
.....	.....	3,490	1,074	355	.....	.....	.....	.....	4,919	224
632	.....	.....	.....	.....	.....	.....	.....	122	754	225
135	470	.....	227	.....	.....	.....	.....	147	979	226
.....	.....	.....	2,000	12,699	2,635	.....	.....	.....	17,334	227
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	228
.....	838	.....	2,800	.....	.....	100	3	.....	3,741	229
.....	1,275	.....	423	.....	.....	.....	.....	105	1,803	230
.....	1,018	.....	1,761	.....	.....	500	.....	.....	3,279	231
.....	185	.....	.....	.....	.....	.....	.....	100	285	232
.....	.....	.....	.....	.....	.....	.....	.....	29	29	233
.....	.....	.....	.....	.....	3,451	.....	.....	.....	3,451	234
.....	.....	.....	.....	.....	.....	.....	.....	3,350	3,350	235
.....	735	1,370	.....	.....	.....	.....	.....	.....	2,105	236
.....	383	.....	3,722	16,609	.....	.....	.....	3,121	23,835	237
.....	505	.....	.....	.....	.....	.....	.....	5	510	238
.....	.....	6,500	4,660	.....	1,528	660	.....	530	13,878	239
.....	.....	.....	.....	.....	.....	.....	.....	67	67	240
.....	273	.....	.....	.....	.....	400	.....	46	719	241
.....	.....	3,726	408	1,730	.....	.....	.....	.....	5,864	242
.....	.....	.....	3,310	4,006	.....	.....	.....	2,471	9,787	243
.....	787	.....	.....	.....	.....	.....	.....	.....	787	244
4,593	.....	.....	1,903	.....	.....	.....	.....	50	6,546	245
3,164	127	.....	849	.....	.....	18	.....	6	4,164	246
2,041	.....	.....	7,721	.....	.....	.....	.....	.....	9,762	247
.....	.....	.....	823	.....	.....	1,049	.....	165	2,037	248
.....	.....	.....	280	5,117	.....	.....	.....	.....	5,397	249
.....	750	.....	1,423	.....	.....	.....	.....	49	2,222	250
.....	750	.....	2,159	.....	.....	1,027	.....	16	3,952	251
.....	285	.....	.....	.....	.....	.....	.....	365	650	252
285	.....	.....	.....	.....	.....	.....	.....	1,193	1,478	253
.....	2,163	.....	.....	.....	.....	.....	.....	168	2,331	254
.....	.....	.....	.....	2,242	.....	8,644	.....	.....	10,886	255
.....	298	3,000	3,750	4,533	505	.....	.....	216	12,302	256
.....	1,110	.....	797	.....	.....	.....	.....	35	1,942	257
.....	.....	.....	6,320	.....	.....	.....	.....	.....	6,320	258
.....	.....	.....	.....	.....	.....	3,281	.....	408	3,689	259
7,046	46	.....	.....	.....	.....	.....	.....	1,900	8,992	260
.....	.....	.....	1,460	.....	.....	.....	.....	.....	1,460	261
.....	29	.....	.....	.....	.....	.....	.....	6	35	262
.....	1,015	.....	.....	.....	.....	.....	.....	76	1,091	263
.....	.....	.....	370	.....	.....	.....	.....	5	375	264
.....	55	.....	.....	.....	.....	.....	.....	137	192	265

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS

Township Municipalities and County in which located.	Receipts, 1907. Balance from 1906.	Municipal and school taxes.	Licenses.	Fees, rents, fines, etc.	Interest and dividends.	Refund of money invested.	Borrowed for current expenses.
	$	$	$	$	$	$	$
266. Lancaster, Glengarry	422	15,016	94	.....	.....	.....	6,449
267. Lavallee, Rainy River	1,627	2,909	163	.....	.....	.....	.....
268. Lavant, Lanark	215	2,153	56	.....	.....	.....	.....
269. Laxton, Digby & Long, Victoria	1,444	2,844	....	2	11	7	.....
270. Leeds & Lansdowne, Front, Leeds	158	19,418	10	93	18	.....	4,800
271. Leeds & Lansdowne, Rear, Leeds	1,444	13,526	110	10	9	.....	2,989
272. Limerick, Hastings	325	1,792	8	.....	.....	.....	.....
273. Lindsay, Bruce	76	4,455	.....	.....	.....	.....	1,265
274. Lobo, Middlesex	8 014	18,369	80	.....	235	.....	.....
275. Lochiel, Glengarry	648	30,644	141	.....	136	.....	.....
276. Logan, Perth	16,512	23,516	53	.....	510	.....	.....
277. London, Middlesex	10,411	45,035	470	22	12	.....	7,000
278. Longueuil, Prescott	.....	3,185	54	.....	.....	.....	.....
279. Loughborough, Frontenac	381	9,509	72	2	.....	.....	.....
280. Louth, Lincoln	1,192	13,471	45	7	17	.....	2,000
281. Luther E., Dufferin	.....	12,602	....	2	1	.....	4,371
282. Luther W., Wellington	1,183	15,458	50	3	39	.....	3,750
283. Lutterworth, Haliburton	46	1,679	....	.....	.....	.....	50
284. McDougall, Parry Sound	643	1,798	....	.....	.....	.....	.....
285. McGillivray, Middlesex	2,076	20,267	....	8	9	.....	5,227
286. McIrvine, Rainy River	271	730	....	.....	.....	.....	.....
287. McKellar, Parry Sound	466	1,643	31	27	.....	.....	.....
288. McKillop, Huron	5,254	17,454	42	.....	810	3,776	496
289. McKim, Sudbury	157	2,364	....	.....	.....	.....	994
290. McLean and Ridout, Muskoka	87	2,866	8	141	.....	.....	.....
291. McMurrich, Parry Sound	1,533	1,939	42	.....	2	.....	.....
292. McNab, Renfrew	5,201	20,438	....	34	50	.....	4,000
293. Macaulay, Muskoka	612	3,055	....	.....	.....	.....	1,275
294. Macdonald & Meredith, Algoma	1,317	3,608	....	3	.....	.....	300
295. Machar, Parry Sound	1,351	2,775	....	.....	.....	.....	.....
296. Madoc, Hastings	2,411	13,702	....	.....	37	.....	.....
297. Maidstone, Essex	586	23,801	158	.....	137	.....	.....
298. Malahide, Elgin	6,005	29,199	23	.....	165	.....	.....
299. Malden, Essex	.....	11,780	108	.....	106	33	5,631
300. Manvers, Durham	1,743	15,638	....	16	19	.....	980
301. Mara, Ontario	812	14,103	168	.....	.....	.....	4,773
302. March, Carleton	341	6,301	....	9	44	.....	700
303. Mariposa, Victoria	823	30,832	....	7	.....	.....	5,000
304. Markham, York	4,602	31,170	....	.....	36	.....	.....
305. Marlborough, Carleton	1,794	8,273	48	.....	45	.....	4,330
306. Marmora and Lake, Hastings	276	7,615	43	80	34	.....	.....
307 Martland, Sudbury	121	299	....	.....	.....	.....	.....
308. Maryborough, Wellington	2,637	19,051	....	11	13	.....	3,500
309. Marysburgh N., Prince Edward	.....	7,597	....	.....	312	109	100
310. Marysburgh S, Prince Edward	670	6,362	....	1	488	70	1,188
311. Matchedash, Simcoe	94	1,697	....	.....	.....	.....	.....
312. Matilda, Dundas	.....	23,976	....	.....	.....	.....	43,691
313. Mattawan, Nipissing	71	543	....	.....	.....	.....	.....
314. Mayo, Hastings	207	1,971	....	.....	.....	.....	.....
315. Medonte, Simcoe	986	21,782	293	431	15	.....	.....
316. Medora and Wood, Muskoka	2,555	8,374	145	207	.....	.....	.....
317. Melancthon, Dufferin	506	17,132	....	.....	1	.....	5,928
318. Mersea, Essex	7,529	36,962	....	5	415	.....	3,980

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Receipts, 1907.—*Continued.*							Disbursements, 1907.					
Borrowed on debentures for schools.	Borrowed on debentures for drainage.	Borrowed on debentures for other purposes.	Premiums on debentures sold.	County grants.	Miscellaneous.	Total receipts.	Allowances, salaries and commissions.	Law costs.	Other expenses of municipal government.	Roads and bridges.	Buildings and other works.	No.
$	$	$	$	$	$	$	$	$	$	$	$	
700	1,021	.....	15	.....	110	23,827	1,078	2	351	5,039	.....	266
.....	.....	.....	.....	.....	6	4,705	356	.....	135	909	124	267
.....	.....	.....	.....	.....	.....	2,424	410	1	69	58	.....	268
1,500	.....	.....	.....	.....	35	5,843	374	.....	83	780	....	269
.....	.....	.....	.....	.....	10	24,507	920	.....	315	6,738	150	270
.....	.....	.....	.....	.....	6	18,094	640	5	135	5,552	.....	271
.....	.....	.....	.....	263	9	2,397	329	.....	97	536	.....	272
.....	.....	.....	.....	275	25	6,096	465	37	134	1,379	.....	273
.....	.....	.....	.....	629	212	27,539	920	.....	342	4,832	.....	274
.....	.....	.....	.....	.....	44	31,613	958	23	348	1,449	.....	275
.....	7,336	.....	....	705	726	49,358	1,073	104	376	6,254	.....	276
.....	1,790	4,000	....	5,029	**5,651	79,420	2,443	202	923	26,199	.....	277
.....	.....	.....	.....	.....	.....	3,239	209	.....	60	99	.....	278
.....	.....	.....	.....	.....	91	10,055	448	.....	178	2,613	.....	279
.....	.....	.....	.....	59	40	16,831	761	209	241	5,425	.....	280
.....	381	.....	....	100	114	17,571	470	171	197	1,835	.....	281
.....	8,115	.....	.....	.....	150	28,748	665	.....	212	2,898	.....	282
500	.....	.....	.....	.....	32	2,307	202	.....	154	126	.....	283
.....	.....	.....	.....	.....	5	2,446	265	3	66	565	.....	284
.....	2,279	.....	.....	.....	387	30,253	760	19	277	5,069	.....	285
.....	.....	.....	.....	.....	236	1,237	225	12	67	53	.....	286
600	.....	.....	.....	.....	193	2,960	277	2	103	361	.....	287
4,700	.....	.....	46	13	1,386	33,977	764	7	233	5,585	.....	288
.....	.....	.....	.....	.....	281	3,796	415	11	68	924	.....	289
.....	.....	.....	.....	.....	311	3,413	440	310	92	517	.....	290
.....	.....	.....	.....	.....	498	4,014	291	10	99	1,369	115	291
.....	.....	.....	.....	.....	*3,207	32,930	896	13	250	15,120	.....	292
.....	.....	.....	.....	.....	58	5,000	360	52	7	1,398	135	293
.....	.....	.....	.....	.....	3	5,231	275	13	79	817	543	294
.....	.....	.....	.....	.....	25	4,151	388	.....	30	101	.....	295
.....	.....	.....	.....	.....	56	16,206	626	20	182	651	.....	296
.....	3,128	.....	36	.....	119	27,968	1,317	74	380	2,532	.....	297
.....	563	.....	.....	.....	35	35,990	1,164	†5,327	441	7,239	.....	298
.....	4,140	.....	25	.....	267	22,090	633	70	216	2,007	74	299
.....	.....	.....	.....	.....	29	18,425	882	22	344	2,048	.....	300
.....	.....	.....	.....	300	226	20,382	957	216	157	4,827	.....	301
.....	.....	.....	.....	26	26	7,447	327	.....	184	997	.....	302
.....	.....	.....	.....	.....	129	36,791	1,116	85	408	5,869	.....	303
6,000	.....	.....	.....	.....	349	42,157	1,355	41	504	8,929	.....	304
.....	1,542	.....	115	.....	‡5,159	21,306	914	319	199	810	.....	305
.....	.....	.....	.....	.....	29	8,077	572	.....	180	847	.....	306
.....	.....	.....	.....	.....	.....	420	61	.....	21	64	.....	307
.....	1,283	.....	.....	.....	256	26,751	927	.....	280	3,733	3,652	308
.....	.....	.....	.....	50	49	8,217	359	12	91	937	48	309
.....	.....	.....	.....	.....	.....	8,779	254	1,330	128	322	.....	310
.....	.....	.....	.....	200	30	2,021	309	.....	48	408	.....	311
.....	.....	.....	.....	.....	1,411	69,078	471	.....	310	3,299	.....	312
.....	.....	.....	.....	.....	.....	614	164	35	28	55	.....	313
.....	.....	.....	.....	263	1	2,442	369	.....	110	248	.....	314
.....	690	.....	.....	.....	‖6,974	31,171	1,056	17	277	4,252	.....	315
.....	.....	.....	.....	.....	305	11,586	754	387	321	3,804	106	316
.....	.....	.....	.....	50	105	23,722	825	.....	281	4,198	22	317
2,700	33,486	.....	81	45	§3,860	89,063	1,691	553	664	3,967	796	318

*Including $3,000 Ontario Government Grant for C. B. Bridge. †Leslie & Nesbit *v.* Malahide.
‡Including $4,941 from N. Gower for drainage. ‖From Orillia Tp. *re* drains, etc.
**Including $4,902 from Legislature for roads, §Including $3,000 from Legislature for drains.

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Disbursements, 1907.—*Continued.*

Township Municipalities.	Board of Health.	Support of the poor and other charities.	County Treasurer for levies.	Payment on account of schools and education.	Drainage works.	Sinking Fund investments and deposits.	Other investments and deposits.
	$	$	$	$	$	$	$
266. Lancaster	62	150	2,339	9,777	1,313	.....	.....
267. Lavallee	5	15	.....	2,235	.....	.....	.....
268. Lavant	11	5	314	1,063	.....	.....	.....
269. Laxton, Digby & Long	3	30	336	2,725	.....	.....	.....
270. Leeds and Lansdowne, Front	23	37	.....	9,505	.....	.....	.....
271. Leeds and Lansdowne, Rear	53	17	1,614	7,033	.....	.....	.....
272. Limerick	.....	53	147	814	.....	.....	.....
273. Lindsay	95	25	178	1,580	.....	.....	.....
274. Lobo	5	189	.....	5,658	12	.....	.....
275. Lochiel	136	58	4,813	19,757	385	.....	.....
276. Logan	139	190	3,549	6,830	7,897	239	.....
277. London	59	80	13,822	18,400	1,600	.....	.....
278. Longueuil	.....	.....	785	1,713	80	.....	.....
279. Loughborough	.....	77	2,694	3,767	.....	.....	.....
280. Louth	30	12	1,572	5,033	.....	.....	.....
281. Luther E	173	33	1,734	5,155	813	.....	.....
282. Luther W	72	63	2,534	6,257	2,540	36	.....
283. Lutterworth	.....	5	182	1,299	.....	.....	.....
284. McDougall	5	5	.....	723	.....	.....	.....
285. McGillivray	69	5	5,142	8,251	2,066	.....	.....
286. McIrvine	.....	5	.....	445	.....	.....	.....
287. McKellar	114	5	.....	1,788	.....	.....	.....
288. McKillop	79	125	4,364	11,451	510	.....	243
289. McKim	.....	18	.....	475	4	.....	.....
290. McLean and Ridout	.....	55	.....	1,322	.....	.....	.....
291. McMurrich	52	188	.....	1,456	.....	.....	.....
292. McNab	218	171	.....	6,934	.....	.....	.....
293. Macaulay	24	75	.....	1,183	.....	.....	.....
294. Macdonald and Meredith	32	.....	.....	2,300	.....	.....	.....
295. Machar	.....	71	.....	2,178	.....	.....	.....
296. Madoc	12	108	3,619	7,591	.....	.....	.....
297. Maidstone	389	500	3,309	7,415	6,001	.....	.....
298. Malahide	3	107	7,037	10,268	1,532	.....	.....
299. Malden	10	80	1,793	3,239	1,012	.....	343
300. Manvers	80	94	3,107	7,519	.....	.....	.....
301. Mara	42	42	2,453	5,346	.....	.....	.....
302. March	7	43	1,264	2,826	707	.....	.....
303. Mariposa	171	36	8,543	11,685	1,403	.....	.....
304. Markham	22	146	6,501	19,632	.....	.....	.....
305. Marlborough	59	10	1,321	4,459	9,031	.....	.....
306. Marmora and Lake	7	225	1,717	3,927	.....	.....	.....
307. Martland	.....	.....	.....	224	.....	.....	.....
308. Maryborough	212	62	2,000	8,610	432	.....	.....
309. Marysburgh N	22	.....	2,100	3,628	.....	.....	27
310. Marysburgh S	.....	14	2,000	3,549	.....	.....	164
311. Matchedash	2	25	329	538	.....	.....	.....
312. Matilda	139	448	3,811	9,993	9,676	.....	435
313. Mattawan	54	.....	.....	215	.....	.....	.....
314. Mayo	.....	.....	127	941	.....	.....	.....
315. Medonte	81	141	3,510	8,996	8,712	.....	.....
316. Medora and Wood	40	201	.....	3,739	.....	20	.....
317. Melancthon	33	5	198	8,990	238	.....	.....
318. Mersea	94	649	11,503	12,597	16,713	.....	.....

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Disbursements, 1907.—*Continued.*								Assets on Dec. 31st, 1907.			
School debentures redeemed.	Drainage debentures redeemed.	All other debentures redeemed.	Refund of moneys borrowed for current expenses.	Interest on loans, advances and debentures.	Discount on debentures sold.	Miscellaneous.	Total disbursements.	Cash in treasury.	Taxes in arrears.	Sinking Fund investments and deposits.	No.
$	$	$	$	$	$	$	$	$	$	$	
580	83	.....	1,158	307	.....	199	22,438	1,389	8,759	.....	266
100	.....	.....	.....	14	.....	56	3,949	756	4,131	.....	267
100	.....	.....	131	14	.....	27	2,203	221	161	.....	268
.....	.....	.....	.....	.....	.....	45	4,376	1,467	343	.....	269
.....	.....	.....	6,150	136	.....	97	24,071	436	176	.....	270
.....	.....	.....	2,989	.....	.....	42	18,080	14	113	.....	271
.....	.....	.....	.....	.....	.....	41	2,017	380	1,768	.....	272
.....	.....	.....	1,983	43	.....	47	5,966	130	3,258	.....	273
165	.....	.....	.....	75	.....	63	12,261	15,278	575	.....	274
720	.....	.....	.....	126	.....	84	28,857	2,756	4,702	.....	275
269	2,521	.....	.....	1,016	.....	*8,598	39,055	10,303	776	911	276
.....	.....	.....	7,000	196	.....	1,656	72,580	6,840	16,219	.....	277
.....	.....	.....	183	20	.....	1	3,150	89	2,082	.....	278
.....	.....	.....	.....	8	.....	62	9,847	208	3,520	.....	279
.....	.....	95	2,000	82	.....	147	15,607	1,224	1,150	.....	280
481	758	.....	5,157	569	.....	25	17,571	.....	223	.....	281
471	932	.....	3,388	935	223	511	21,737	7,011	682	416	282
.....	.....	.....	50	.....	.....	58	2,076	231	816	.....	283
.....	.....	.....	.....	.....	.....	98	1,730	716	1,529	.....	284
585	.....	.....	5,227	159	.....	411	28,040	2,213	1	.....	285
119	.....	.....	.....	143	.....	95	1,164	73	1,859	.....	286
100	.....	.....	.....	12	.....	45	2,810	150	1,914	.....	287
304	917	227	496	898	.....	†4,421	30,624	3,353	85	10,863	288
347	.....	.....	1,200	293	.....	13	3,768	28	1,226	.....	289
.....	.....	87	.....	105	.....	212	3,140	273	1,829	.....	290
102	.....	.....	.....	6	.....	13	3,701	313	1,223	.....	291
867	.....	.....	4,000	258	.....	41	28,768	4,162	868	.....	292
76	.....	.....	1,000	56	.....	87	4,453	547	711	.....	293
301	.....	.....	500	208	.....	120	5,188	43	1,745	.....	294
273	.....	.....	.....	108	.....	384	3,533	618	983	.....	295
206	.....	1,440	.....	852	.....	44	15,351	855	5,982	.....	296
92	3,601	.....	.....	1,386	.....	122	27,118	850	22,778	.....	297
.....	1,170	207	.....	294	.....	1,058	35,847	143	1,270	.....	298
.....	754	.....	10,418	807	.....	123	21,579	511	5,119	.....	299
581	.....	.....	980	223	.....	22	15,902	2,523	253	.....	300
141	.....	.....	5,002	274	.....	152	19,609	773	452	.....	301
.....	.....	.....	.....	.....	.....	42	6,397	1,050	1,224	.....	302
212	583	.....	5,840	515	.....	119	36,585	206	276	.....	303
181	.....	.....	.....	440	.....	558	38,309	3,848	1,939	.....	304
.....	292	.....	3,237	456	.....	199	21,306	.....	4,517	.....	305
226	.....	.....	.....	50	.....	167	7,918	159	2,013	.....	306
.....	.....	.....	.....	.....	.....	47	417	3	686	.....	307
624	104	135	3,500	210	6	1,377	25,864	887	1,726	.....	308
.....	.....	.....	806	11	.....	25	8,066	151	117	.....	309
.....	.....	.....	615	70	.....	102	8,548	231	315	.....	310
.....	.....	.....	.....	15	.....	16	1,690	331	1,637	.....	311
.....	3,477	.....	35,909	923	.....	187	69,078	.....	3,193	.....	312
.....	.....	.....	.....	.....	.....	17	568	46	448	.....	313
.....	.....	.....	.....	.....	.....	36	1,831	611	1,848	.....	314
182	258	208	.....	395	.....	556	28,641	2,530	3,931	.....	315
.....	.....	.....	.....	18	.....	212	9,602	1,984	4,500	40	316
444	.....	.....	6,928	197	.....	25	22,384	1,338	1,049	.....	317
712	32,653	153	.....	4,012	.....	482	87,239	1,824	30,849	.....	318

*Including $6,323 bonus to railway and $2,071 paid to other municipalities.
†Including $3,000 bonus to C. P. Railway and $841 to other municipalities.

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Township Municipalities.	Assets on December 31st, 1907.—*Continued.*			
	All other investments and deposits.	Other property.	Miscellaneous.	Total assets.
	$	$	$	$
266. Lancaster			2,420	12,568
267. Lavallee		415	161	5,463
268. Lavant			130	512
269. Laxton, Digby and Long		500	1,800	4,110
270. Leeds and Lansdowne, Front		5,000	838	6,450
271. Leeds and Lansdowne, Rear				127
272. Limerick		250	84	2,482
273. Lindsay			381	3,769
274. Lobo		1,610	2,707	20,170
275. Lochiel		70	720	8,248
276. Logan			1,497	13,487
277. London		2,000	2,518	27,577
278. Longuenil				2,171
279. Loughborough			187	3,915
280. Louth		205	1,185	3,764
281. Luther E		667	3,139	4,029
282. Luther W		800	5,908	14,817
283. Lutterworth			500	1,547
284. McDougall		51		2,296
285. McGillivray		1,000	1,143	4,357
286. McIrvine		50	2,744	4,726
287. McKellar		530	724	3,318
288. McKillop	4,731	350	4,504	23,886
289. McKim		611	2,638	4,503
290. McLean and Ridout		1,000		3,102
291. McMurrich		561	185	2,282
292. McNab		1,000	2,145	8,175
293. Macaulay		1,050	463	2,771
294. Macdonald and Meredith			2,893	4,681
295. Machar		850	1,738	4,189
296. Madoc		1,000	800	8,637
297. Maidstone		600	2,870	27,098
298. Malahide		250		1,663
299. Malden	310	800	370	7,110
300. Manvers			2,140	4,916
301. Mara		2,520	2,878	6,623
302. March	400	2,600	34	5,308
303. Mariposa		4,795	3,039	8,316
304. Markham		1,150	5,859	12,796
305. Marlborough		260	1,087	5,864
306. Marmora and Lake		800	714	3,686
307. Martland				689
308. Maryborough		4,430	467	7,510
309. Marysburgh N	6,864	1,000	172	8,304
310. Marysburgh S	10,231	850		11,627
311. Matchedash			300	2,268
312. Matilda	435		13,547	17,175
313. Mattawan			1	495
314. Mayo			71	2,530
315. Medonte		1,900	5,679	14,043
316. Medora and Wood		1,745	315	8,584
317. Melancthon		1,200	584	4,171
318. Mersea		4,500	7,831	45,004

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Liabilities on December 31st, 1907.										
County levy.	Local school rates.	Railway debentures.	School debentures.	Drainage debentures.	All other debentures.	Loans for current expenses and interest.	Due Sinking Fund.	Miscellaneous.	Total liabilities.	No.
$	$	$	$	$	$	$	$	$	$	
2,901	125	.....	2,334	938	.....	6,449	.....	1,776	14,523	266
.....	1,988	.....	100	.....	.....	.....	.....	.....	2,088	267
.....	60	.....	100	.....	.....	.....	.....	.....	160	268
.....	.....	.....	1,500	.....	.....	.....	.....	.....	1,500	269
2,657	.....	.....	.....	.....	.....	.....	.....	110	2,767	270
.....	82	.....	.....	.....	.....	.....	.....	217	299	271
.....	1,038	.....	.....	.....	.....	.....	.....	200	1,238	272
.....	1,325	.....	.....	.....	.....	$00	.....	.....	2,125	273
6,684	.....	.....	1,604	.....	.....	.....	.....	53	8,341	274
.....	192	.....	750	.....	.....	.....	.....	2,310	3,252	275
.....	.....	6,500	1,016	20,942	.....	.....	.....	90	28,548	276
15,542	56	.....	.....	1,790	4,000	.....	.....	.....	21,388	277
916	965	.....	.....	.....	.....	.....	.....	290	2,171	278
2,592	731	.....	.....	.....	.....	.....	.....	237	3,560	279
1,793	.....	.....	.....	.....	787	.....	.....	1,744	4,324	280
.....	.....	.....	3,020	4,117	.....	371	.....	.....	7,508	281
.....	.....	.....	5,908	9,880	.....	1,285	.....	422	17,495	282
.....	537	.....	500	.....	.....	.....	.....	68	1,105	283
.....	380	.....	.....	.....	.....	.....	.....	.....	380	284
.....	.....	.....	1,143	2,279	.....	.....	.....	.....	3,422	285
.....	.....	.....	2,744	.....	.....	.....	.....	89	2,833	286
.....	599	.....	700	.....	.....	.....	.....	12	1,311	287
.....	.....	5,144	4,396	10,293	.....	.....	.....	3,000	22,833	288
.....	671	.....	3,538	.....	.....	294	.....	292	4,795	289
.....	1,123	.....	.....	.....	2,250	.....	.....	193	3,566	290
.....	1,048	.....	.....	.....	.....	.....	.....	10	1,058	291
2,477	2,218	.....	2,049	.....	.....	.....	.....	210	6,954	292
.....	417	.....	458	.....	.....	725	.....	258	1,858	293
.....	.....	.....	2,893	.....	.....	.....	.....	.....	2,893	294
.....	.....	.....	1,737	.....	.....	.....	.....	.....	1,737	295
.....	.....	21,757	800	.....	.....	.....	.....	.....	22,557	296
3,309	6,764	.....	657	26,238	319	.....	.....	561	37,848	297
.....	.....	2,076	.....	3,969	.....	.....	.....	290	6,335	298
.....	2,267	.....	.....	11,356	.....	1,816	.....	270	15,709	299
.....	.....	.....	2,079	.....	.....	.....	.....	100	2,179	300
.....	.....	.....	2,878	.....	.....	273	.....	.....	3,151	301
.....	241	.....	.....	.....	.....	700	.....	102	1,043	302
.....	.....	.....	1,347	7,303	.....	.....	.....	.....	8,650	303
7,372	.....	.....	5,819	.....	.....	.....	.....	1,371	14,562	304
.....	.....	.....	.....	6,509	.....	3,758	.....	.....	10,267	305
2,031	224	.....	547	.....	.....	.....	.....	1,037	3,839	306
.....	322	.....	.....	.....	.....	.....	.....	108	430	307
2,322	.....	.....	350	1,179	1,110	.....	.....	1,071	6,032	308
.....	.....	.....	.....	.....	.....	.....	.....	69	69	309
.....	.....	.....	.....	.....	.....	2,064	.....	.....	2,064	310
317	1,104	.....	300	.....	.....	.....	.....	.....	1,721	311
.....	.....	.....	.....	14,777	.....	18,662	.....	170	33,609	312
.....	134	.....	.....	.....	.....	.....	.....	61	195	313
147	1,688	.....	.....	.....	.....	.....	.....	304	2,139	314
277	.....	.....	5,679	3,049	1,234	.....	.....	.....	10,239	315
.....	1,370	.....	300	.....	.....	.....	.....	1,944	3,614	316
3,122	.....	.....	507	.....	.....	.....	.....	145	3,774	317
.....	740	.....	5,822	74,257	3,695	4,000	.....	14,846	103,360	318

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Township Municipalities and Counties in which located.	Receipts, 1907. Balance from 1906.	Municipal and school taxes.	Licenses.	Fees, rents, fines, etc.	Interest and dividends.	Refund of money invested.	Borrowed for current expenses.
	$	$	$	$	$	$	$
319. Metcalfe, Middlesex	7,198	18,381	45	2	41	.....	2,000
320. Middleton, Norfolk	3,701	12,725	48	300	109	.....	.....
321. Minden, Haliburton	443	4,065	36	81	.....	.....	200
322. Minto, Wellington	1,259	18,859	....	54	70	650	3,500
323. Monaghan N., Peterborough	88	6,044	56	....	.....	.....	3,078
324. Monaghan S., Northumberland	.....	5,088	.....	.....	.....	.....	338
325. Monck, Muskoka	1,218	4,872	.....	.....	.....	.....	100
326. Monmouth, Haliburton	429	2,919	.....	.....	50	151	.....
327. Mono, Dufferin	1,723	15,502	8	.....	23	.....	2,400
328. Montague, Lanark	252	11,836	16	.....	.....	.....	800
329. Monteagle & Herschel, Hastings	397	3,880	53	.....	.....	.....	.....
330. Moore, Lambton	789	13,030	....	124	.....	.....	5,000
331. Morley and Patullo, Rainy River	1,172	2,712	266	....	.....	.....	.....
332. Morrington, Perth	5,706	26,998	437	.....	.....	.....	6,000
333. Morris, Huron	7,714	16,669	84	.....	293	.....	3,000
334. Morrison, Muskoka	788	2,411	.....	.....	14	.....	.....
335. Mosa, Middlesex	2,661	16,915	....	.....	.....	.....	5,621
336. Moulton, Haldimand	.....	6,964	....	.....	246	311	312
337. Mountain, Dundas	718	28,658	....	..	7	.....	11,520
338. Mulmur, Dufferin	490	17,696	50	7	3	.....	3,527
339. Murray, Northumberland	2,521	12,637	100	16	13	.....	575
340. Muskoka, Muskoka	1,601	2,361	5	.....	.....	.....	.....
341. Nairn and Lorne, Sudbury	387	1,657	95	67	.....	.....	.....
342. Nassagaweya, Halton	1,886	10,264	...	26	450	51	1,937
343 Neebing, Thunder Bay	1,436	7,370	....	....	137	.....	1,215
344. Neelon and Garson, Sudbury	67	1,236	....	.....	.....	.....	664
345. Nelson, Halton	2,506	19,194	38	19	1,664	4,240	7,354
346. Nepean, Carleton	2,971	30,000	336	48	865	.....	.....
347. Niagara, Lincoln	558	12,622	...	105	60	.....	4,000
348. Nichol, Wellington	.....	8,856	50	8	8	.....	599
349. Nipissing, Parry Sound	75	1,551	42	.....	.....	.....	.....
350. Nissouri E., Oxford	1,908	18,298	....	103	11	.....	19,985
351. Nissouri W., Middlesex	3,226	21,866	....	.....	81	.....	1,800
352. Normanby, Grey	329	19,532	384	5	.....	.....	3,517
353. Norwich N., Oxford	4,640	20,497	...	15	86	.....	5,459
354. Norwich S., Oxford	584	15,153	....	26	37	.....	3,000
355. Nottawasaga, Simcoe	8,832	26,962	....	.....	.....	.....	3,000
356. Oakland, Brant	279	4,434	15	.....	139	100	500
357. Oakley, Muskoka	509	1,291	4	.....	.....	.....	.....
358. O'Connor, Thunder Bay	.....	436	....	.....	.....	.....	160
359. Olden, Frontenac	311	3,929	1	15	.....	.....	100
360. Oliver, Thunder Bay	248	4,287	....	84	106	.....	800
361. Oneida, Haldimand	1,408	9,258	....	.....	25	.....	.....
362. Onondaga, Brant	2,744	6,673	....	2	16	.....	.....
363. Ops, Victoria	863	19,498	...	....	307	.....	3,500
364. Orford, Kent	8,014	24,843	90	... ..	81	.....	10,500
365. Orillia, Simcoe	1,253	18,448	48	.....	.....	.....	17,000
366. Oro, Simcoe	5,498	15,563	..	13	88	.....	.....
367. Osgoode, Carleton	.....	21,531	...	322	.... ..	1,178	45,320
368. Osnabruck, Stormont	2,037	19,447	....	....	.....	.....	37,823
369. Oso, Frontenac	214	3,466	84	5	.....	.....	.....
370. Osprey, Grey	2,366	14,119	....	.....	.....	.....	2,500
371. Otonabee, Peterborough	812	21,527	....	43	99	.....	.....

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Receipts, 1907.—*Continued*							Disbursements, 1907.					
Borrowed on debentures for schools.	Borrowed on debentures for drainage.	Borrowed on debentures for other purposes.	Premiums on debentures sold.	County grants.	Miscellaneous.	Total receipts.	Allowances, salaries and commissions.	Law costs.	Other expenses of municipal government.	Roads and bridges.	Buildings and other works.	No.
$	$	$	$	$	$	$	$	$	$	$	$	
.....	350	.....	.....	563	166	28,746	606	1,830	211	4,431	.....	319
2,000	1,156	.....	37	.....	752	20,828	785	65	288	1,973	.....	320
.....	.....	.....	.....	.....	.....	4,825	327	.....	110	292	.....	321
.....	.....	.....	.....	.....	155	24,547	1,066	38	395	4,582	.....	322
1,800	.....	.....	.....	.....	9	11,075	342	14	181	2,156	.....	323
.....	.....	.....	.....	.....	137	5,563	266	1	81	901	.....	324
.....	.....	.....	.....	.....	.....	6,190	440	29	164	1,775	.....	325
.....	.....	.....	.....	.....	.....	3,549	228	60	144	38	.....	326
.....	.....	.....	.....	.....	.....	19,656	901	62	390	3,825	.....	327
.....	.....	.....	.....	361	13	13,278	470	.....	247	880	288	328
.....	.....	.....	.....	325	.....	4,655	367	.....	94	373	.....	329
.....	7,108	.....	88	.....	475	56,814	1,241	33	506	7,584	202	330
.....	.....	.....	.....	.....	32	4,182	339	5	46	485	.....	331
.....	7,703	.....	.....	1,076	†4,158	52,078	1,054	281	451	7,295	.....	332
1,800	8,290	.....	.....	.....	288	38,138	754	2	252	3,842	.....	333
.....	.....	.....	.....	.....	7	3,220	247	.....	110	604	5	334
.....	997	.....	.....	762	312	27,268	905	86	285	3,154	.....	335
.....	.....	.....	.....	.....	390	8,223	514	41	205	540	.....	336
.....	5,757	.....	.....	.....	17	46,677	993	.....	292	2,176	.....	337
1,600	.....	.....	.....	50	94	23,517	913	.....	371	4,058	.....	338
1,500	.....	.....	.....	.....	214	17,576	632	16	168	2,005	.....	339
.....	.....	.....	.....	.....	120	4,087	341	20	50	898	.....	340
.....	.....	.....	.....	.....	.....	2,206	366	26	140	218	3	341
.....	.....	.....	.....	.....	102	14,716	695	10	212	2,488	.....	342
.....	.....	.....	.....	.....	1,193	11,351	1,127	.....	482	5,554	.....	343
.....	.....	.....	.....	.....	.....	1,967	466	11	46	84	.....	344
.....	.....	.....	.....	.....	487	35,502	1,158	1,243	337	7,057	.....	345
.....	.....	.....	.....	.....	342	34,562	1,945	9	608	8,854	.....	346
.....	.....	.....	.....	.....	254	17,599	474	34	259	4,822	.....	347
.....	.....	.....	.....	.....	125	9,646	721	58	73	1,191	.....	348
.....	.....	.....	.....	.....	14	1,682	278	7	36	163	.....	349
.....	.....	.....	.....	.....	240	40,545	566	34	273	7,350	.....	350
.....	.....	.....	.....	733	193	27,899	927	57	317	9,918	.....	351
.....	.....	.....	.....	.....	568	24,335	971	1,071	391	2,611	.....	352
.....	3,508	.....	15	.....	630	34,850	764	70	330	5,788	.....	353
.....	.....	.....	.....	516	60	19,376	466	45	287	3,637	.....	354
.....	.....	.....	.....	.....	246	39,040	1,762	.....	212	7,916	.....	355
.....	.....	.....	.....	10	53	5,530	334	48	130	626	.....	356
.....	.....	.....	.....	.....	218	2,022	314	2	32	532	85	357
.....	.....	.....	.....	.....	.....	596	148	54	19	97	27	358
.....	.....	.....	.....	.....	124	4,480	358	4	41	615	.....	359
.....	.....	.....	.....	.....	.....	5,525	461	7	196	1,616	.....	360
1,500	.....	.....	.....	.....	41	12,232	442	.....	168	1,176	.....	361
.....	.....	856	6	.....	117	10,414	488	512	200	3,787	.....	362
.....	.....	.....	.....	.....	157	24,325	903	690	285	5,033	.....	363
.....	3,668	.....	.....	.....	581	47,807	1,495	282	428	6,515	2,380	364
.....	3,822	.....	.....	106	29	40,706	1,207	203	532	3,839	26	365
.....	.....	.....	.....	.....	.....	21,162	1,045	5	455	2,748	.....	366
.....	937	.....	.....	.....	*13,456	82,744	1,625	397	453	3,606	.....	367
.....	.....	.....	.....	.....	274	59,581	691	512	393	3,760	.....	368
.....	.....	.....	.....	.....	5	3,771	268	97	171	.....	.....	369
4,200	.....	.....	.....	.....	53	23,238	986	155	311	2,702	.....	370
.....	.....	.....	.....	162	379	23,022	535	388	208	5,289	.....	371

*Including $8,496 from other municipalities and $4,555 refund from Drainage balance.

†Including $3,952 from other municipalities on drains.

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Township Municipalities.	Disbursements, 1907.—*Continued.*						
	Board of Health.	Support of the poor and other charities.	County Treasurer for levies.	Payment on account of schools and education.	Drainage works.	Sinking Fund investments and deposits.	Other investments and deposits.
	$	$	$	$	$	$	$
319. Metcalfe	188	.....	7,317	4,668	1,220	.....	.....
320. Middleton	50	7	1,500	7,514	750	.....	.....
321. Minden	.....	153	663	2,821	.....	.....	.....
322. Minto	42	220	3,911	7,609	.....	.....	665
323. Monaghan N.	30	32	1,858	3,914	.....	.....	.....
324. Monaghan S.	5	17	1,651	2,539	.....	.....	.....
325. Monck	14	10	.....	1,727	.....	.....	.....
326. Monmouth	6	68	220	1,744	.....	85	.....
327. Mono	33	137	2,870	7,301	1,381	.....	.....
328. Montague	8	3	2,544	5,973	.....	.....	.....
329. Monteagle and Herschel	18	5	297	2,364	.....	.....	.....
330. Moore	111	576	4,339	13,399	11,554	.....	.....
331. Morley and Patullo	.....	5	.....	1,457	.....	.....	.....
332. Morrington	56	28	4,284	7,970	11,082	.....	.....
333. Morris	14	105	8,543	7,962	5,011	.....	.....
334. Morrison	6	5	.....	1,110	.....	.....	.....
335. Mosa	114	28	4,566	5,241	2,173	.....	.....
336. Moulton	38	81	1,551	3,536	640	.....	311
337. Mountain	16	364	5,149	10,706	8,219	.....	5,757
338. Mulmur	61	15	.....	10,901	.....	.....	.....
339. Murray	15	42	3,343	7,648	.....	.....	.....
340. Muskoka	.....	8	.....	1,232	.....	.....	.....
341. Nairn and Lorne	16	.....	.....	350	.....	.....	.....
342. Nassagaweya	.....	377	1,970	5,812	.....	.....	10
343. Neebing	42	65	.....	.....	.....	817	.....
344. Neelon and Garson	.....	25	.....	1,070	.....	.....	.....
345. Nelson	31	595	2,879	10,165	.....	.....	4,448
346. Nepean	104	136	4,331	13,254	489	.....	.....
347. Niagara	26	19	4,002	3,463	.....	.....	.....
348. Nichol	49	.....	2,286	2,199	.....	.....	.....
349. Nipissing	21	5	.....	722	.....	.....	.....
350. Nissouri E.	69	54	4,123	7,341	321	.....	.....
351. Nissouri W.	88	.....	.....	7,237	846	.....	.....
352. Normanby	415	282	3,735	10,309	.....	.....	.....
353. Norwich N.	52	115	2,988	6,220	2,664	.....	.....
354. Norwich S.	25	2	2,345	6,287	283	.....	62
355. Nottawasaga	25	118	6,933	12,517	.....	.....	.....
356. Oakland	8	106	598	2,033	.....	.....	100
357. Oakley	.....	5	.....	665	.....	.....	100
358. O'Connor	.....	.....	.....	100	.....	.....	.....
359. Olden	43	165	678	2,475	.....	.....	.....
360. Oliver	30	50	.....	1,200	.....	.....	182
361. Oneida	26	213	3,065	5,570	.....	.....	.....
362. Onondaga	10	143	1,183	2,856	.....	.....	.....
363. Ops	91	38	5,353	5,890	347	.....	.....
364. Orford	36	390	1,832	8,334	2,931	.....	.....
365. Orillia	91	255	3,049	6,433	5,938	.....	.....
366. Oro	18	97	1,642	8,646	.....	.....	.....
367. Osgoode	64	15	2,000	11,796	3,310	81	5,064
368. Osnabruck	30	374	2,935	10,847	14,750	.....	.....
369. Oso	72	57	599	2,281	.....	.....	.....
370 Osprey	114	9	2,252	11,157	6	.....	.....
371. Otonabee	29	252	6,767	8,599	.....	.....	.....

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Disbursements, 1907.—*Continued.*								Assets on December 31, 1907			
School debentures redeemed.	Drainage debentures redeemed.	All other debentures redeemed.	Refund of moneys borrowed for current expenses.	Interest on loans, advances and debentures.	Discount on debentures sold.	Miscellaneous.	Total disbursements.	Cash in treasury.	Taxes in arrears.	Sinking Fund, investments and deposits.	No.
$	$	$	$	$	$	$	$	$	$	$	
.....	221	1,995	2,000	373	.....	57	25,117	3,629	1,817	.....	319
175	1,095	.....	.....	510	.....	190	14,902	5,926	2,224	.....	320
126	.....	.....	200	40	.....	.....	4,732	93	2,422	.....	321
105	361	.....	3,500	411	.....	198	23,103	1,444	190	.....	322
.....	.....	.....	2,000	38	.....	35	10,600	475	60	.....	323
.....	.....	.....	81	6	.....	15	5,563	.....	497	.....	324
300	.....	.....	100	51	.....	65	4,675	1,515	939	.....	325
50	.....	.....	.....	58	.....	73	2,774	775	2,041	441	326
103	.....	.....	2,400	57	.....	46	19,506	150	.....	.....	327
.....	.....	.....	2,230	288	.....	5	12,936	342	1,075	.....	328
263	.....	.....	.....	90	.....	76	3,947	708	3,950	.....	329
198	7,169	.....	1,000	2,460	.....	1,497	51,869	4,745	14,982	.....	330
.....	.....	.....	500	11	.....	192	3,040	1,142	1,388	.....	331
415	1,811	2,589	6,000	1,697	30	1,619	46,662	5,416	7	.....	332
320	630	127	3,000	749	21	†3,564	84,896	3,242	1,631	.....	333
.....	.....	.....	.....	.....	.....	5	2,092	1,128	667	.....	334
.....	1,633	.....	5,429	410	.....	1,408	25,432	1,836	12,083	.....	335
.....	.....	.....	295	140	.....	331	8,223	.....	.....	4,212	336
236	3,396	.....	6,058	3,062	.....	253	46,677	.....	2,084	.....	337
194	.....	.....	3,527	151	.....	153	20,344	3,173	235	.....	338
.....	.....	.....	575	29	.....	218	14,691	2,885	1,425	.....	339
77	.....	.....	.....	40	91	116	2,873	1,214	1,065	.....	340
.....	.....	.....	125	11	.....	58	1,313	893	4,175	.....	341
.....	.....	.....	1,937	1	.....	228	13,740	976	3,223	.....	342
.....	.....	.....	1,000	1,425	.....	839	11,351	.....	4,720	5,712	343
.....	.....	.....	200	9	.....	45	1,956	11	1,686	.....	344
.....	.....	.....	7,000	200	.....	389	35,502	.....	1,378	.....	345
802	482	806	.....	1,254	.....	260	33,334	1,228	28,276	.....	346
.....	.....	.....	3,200	120	.....	89	16,508	1,091	913	.....	347
180	.....	.....	2,701	49	.....	139	9,646	.....	3,944	.....	348
204	.....	.....	.....	36	.....	.....	1,472	210	2,399	.....	349
223	205	.....	14,500	404	.....	*5,082	40,545	.....	183	.....	350
.....	.....	.....	500	.....	.....	349	20,239	7,660	8,788	.....	351
.....	.....	.....	3,517	89	.....	298	23,719	616	75	.....	352
1,044	1,056	.....	6,459	431	.....	142	28,123	6,727	274	.....	353
.....	101	.....	3,000	61	.....	390	16,991	2,385	4	.....	354
141	.....	.....	3,000	195	.....	516	33,335	5,705	1,835	.....	355
.....	.....	600	500	30	.....	95	5,208	322	18	.....	356
57	.....	.....	.....	19	.....	2	1,813	209	772	.....	357
.....	.....	.....	100	.....	.....	.....	545	51	.....	.....	358
.....	.....	.....	.....	.....	.....	101	4,480	.....	1,858	.....	359
54	.....	.....	1,000	176	.....	265	5,237	288	1,692	1,155	360
300	.....	.....	.....	31	.....	51	11,042	1,190	.....	.....	361
.....	.....	473	.....	104	.....	84	9,840	574	221	.....	362
.....	577	683	3,500	707	.....	227	24,324	1	9	.....	363
347	1,977	687	13,500	594	.....	195	41,923	5,884	3,422	.....	364
525	306	.....	14,000	1,017	295	20	37,736	2,970	2,388	.....	365
203	.....	.....	.....	113	.....	.....	17,972	3,190	4,105	.....	366
276	3,288	955	46,836	2,609	.....	319	82,694	50	10,097	302	367
273	1,007	.....	22,520	1,046	.....	90	59,228	353	8,575	.....	368
.....	.....	.....	.....	.....	.....	32	3,577	197	1,061	.....	369
614	.....	.....	2,500	417	.....	208	21,434	1,804	1,025	.....	370
95	.....	.....	.....	79	.....	3	22,244	778	1,050	.....	371

* Including $5,000 railway bonus.

† Including $3,500 railway bonus.

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Township Municipalities.	Assets on December 31, 1907.—*Continued.*			
	All other investments and deposits.	Other property.	Miscellaneous.	Total assets.
	$	$	$	$
319. Metcalfe		1,300	2,737	9,483
320. Middleton		1,550	2,697	12,397
321. Minden			1,042	3,557
322. Minto	1,048	1,000	6,752	10,434
323. Monaghan N		1,565	1,961	4,061
324. Monaghan S			464	961
325. Monck			1,080	3,534
326. Monmouth		125	459	3,841
327. Mono			1,466	1,616
328. Montague		4,626	5,974	12,017
329. Monteagle and Herschel			1,243	5,901
330. Moore		6,000	45,041	70,768
331. Morley and Patullo		125	1,250	3,905
332. Morrington			432	5,855
333. Morris		1,350	2,657	8,880
334. Morrison		150		1,945
335. Mosa				13,919
336. Moulton			312	4,524
337. Mountain	5,757	1,000	3,355	12,196
338. Mulmur		900	2,113	6,421
339. Murray		2,000	1,500	7,810
340. Muskoka			338	2,617
341. Nairn and Lorne		1,250		6,318
342. Nassagaweya	9,051	1,200		14,450
343. Neebing		385	4,706	15,523
344. Neelon and Garson				1,697
345. Nelson	26,948	1,625	780	30,731
346. Nepean	9,500	5,051	8,954	53,009
347. Niagara		300	79	2,383
348. Nichol			1,008	4,952
349. Nipissing		100	482	3,191
350. Nissouri E			4,233	4,416
351. Nissouri W		360	240	17,048
352. Normanby		2,000	144	2,835
353. Norwich N		115	3,468	10,584
354. Norwich S	62	2,446	134	5,031
355. Nottawasaga		515	3,217	11,272
356. Oakland	4,544	2,500		7,384
357. Oakley	100		296	1,377
358. O'Connor				51
359. Olden		1,000		2,858
360. Oliver	1,250	1,700	1,113	7,198
361. Oneida		1,000	1,200	3,390
362. Onondaga		3,000		3,795
363. Ops		1,000	5,656	6,666
364. Orford		5,500	4 526	19,332
365. Orillia		1,350	16,115	22,823
366. Oro		1,700	2,344	11,339
367. Osgoode	18,886	5,500	5,301	40,139
368. Osnabruck		1,500	36,720	47,148
369. Oso		500	342	2,100
370. Osprey			6,595	9,424
371. Otonabee		3,000	665	5,493

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Liabilities on December 31, 1907.										
County levy.	Local school rates.	Railway debentures.	School debentures.	Drainage debentures.	All other debentures.	Loans for current expenses and interest.	Due Sinking Fund.	Miscellaneous.	Total liabilities.	No.
$	$	$	$	$	$	$	$	$	$	
.....	.....	.....	.....	216	4,304	.....	.....	2,487	7,007	319
620	965	.....	2,697	8,295	.....	.....	.....	.....	12,577	320
.....	1,470	.....	1,042	.....	.....	.....	.....	75	2,587	321
.....	151	.....	895	6,875	.....	.....	.....	105	8,026	322
.....	.....	.....	1,800	.....	.....	1,078	.....	97	2,975	323
.....	.....	.....	.....	.....	.....	338	.....	.....	338	324
.....	.....	.....	1,080	.....	.....	.....	.....	105	1,185	325
217	250	.....	900	.....	.....	.....	.....	.....	1,367	326
.....	.....	.....	223	.....	.....	.....	.....	160	383	327
.....	126	.....	.....	.....	.....	1,030	.....	232	1,388	328
300	2,687	.....	1,243	.....	.....	.....	.....	425	4,655	329
4,348	3,102	.....	900	45,819	.....	4,000	.....	6,247	64,416	330
.....	568	.....	850	.....	.....	.....	.....	177	1,595	331
.....	.....	19,625	432	22,292	.....	.....	.....	.....	42,349	332
.....	15	3,133	2,480	10,942	.....	.....	.....	.....	16,570	333
.....	1,010	.....	.....	.....	.....	.....	.....	.....	1,010	334
4,364	.....	.....	.....	4,128	.....	5,621	.....	233	14,346	335
.....	114	.....	.....	.....	.....	312	.....	.....	426	336
.....	.....	.....	424	54,640	.....	12,000	.....	.....	67,064	337
2,766	75	.....	1,406	.....	.....	.....	.....	70	4,317	338
3,133	.....	.....	1,500	.....	.....	.....	.....	.....	4,633	339
.....	406	.....	337	.....	.....	.....	.....	143	886	340
.....	375	.....	.....	.....	.....	50	.....	.....	425	341
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	342
.....	.....	.....	.....	.....	18,500	215	.....	1,223	19,938	343
.....	905	.....	.....	.....	.....	464	.....	121	1,490	344
.....	64	.....	.....	.....	.....	354	.....	.....	418	345
4,331	12,609	.....	8,514	2,650	11,960	.....	.....	1,360	41,424	346
.....	3,233	.....	.....	.....	.....	800	.....	84	4,117	347
.....	1,716	.....	720	.....	.....	599	.....	269	3,304	348
.....	113	.....	482	.....	.....	.....	.....	.....	595	349
.....	.....	.....	4,146	1,413	.....	5,634	.....	.....	11,193	350
7,467	.....	.....	.....	.....	.....	1,827	.....	4,325	13,619	351
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	352
.....	.....	.....	3,456	4,752	.....	.....	.....	.....	8,208	353
.....	.....	.....	.....	.....	.....	.....	.....	62	62	354
6,972	876	.....	2,486	.....	.....	.....	.....	.....	10,334	355
.....	.....	.....	.....	.....	.....	700	.....	.....	700	356
.....	338	.....	265	.....	.....	35	.....	.....	638	357
.....	.....	.....	.....	.....	.....	60	.....	.....	60	358
.....	304	.....	.....	.....	.....	100	.....	131	535	359
.....	.....	.....	1,113	.....	2,000	.....	.....	.....	3,113	360
.....	.....	.....	1,200	.....	.....	.....	.....	.....	1,200	361
.....	.....	.....	.....	.....	2,463	.....	.....	.....	2,463	362
.....	96	9,829	.....	5,129	.....	.....	.....	1,110	16,164	363
2,290	3,672	1,097	745	6,973	523	.....	.....	2,889	18,189	364
2,939	5,253	.....	3,234	3,516	.....	5,000	.....	306	20,248	365
4,701	.....	.....	2,297	.....	.....	.....	.....	100	7,098	366
1,978	.....	.....	3,504	33,594	3,547	26,439	.....	1,114	70,176	367
.....	3,819	.....	1,723	11,431	5,959	38,633	.....	906	62,471	368
407	100	.....	.....	.....	.....	.....	.....	61	568	369
.....	.....	.....	6,595	.....	.....	.....	.....	220	6,815	370
.....	.....	.....	665	.....	.....	.....	.....	575	1,240	371

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Township Municipalities and Counties in which located.	Receipts, 1907.						
	Balance from 1906.	Municipal and school taxes.	Licenses.	Fees, rents, fines, etc.	Interest and dividends.	Refund of money invested.	Borrowed for current expenses.
	$	$	$	$	$	$	$
372. Oxford on Rideau, Grenville ...	2,252	13,792	112	24	66	.....	3,900
373. Oxford E., Oxford	2,524	14,186	....	.....	32	.....	.....
374. Oxford N., Oxford	1,003	8,582	....	320	24	.....	.....
375. Oxford W., Oxford	67	12,588	....	767	.....	.....	1,140
376. Paipoonge, Thunder Bay	1,720	4,089	91	81	94	.....	.....
377. Pakenham, Lanark.....	1,489	10,618	169	.....	39	.....	.....
378. Palmerston & Canonto, Frontenac	537	2,582	52	8	.....	.....	.....
379. Papineau, Nipissing	104	890	....	.....	.....	.....	.....
380. Peel, Wellington.....	.....	25,721	....	.....	.....	.....	4,800
381. Pelee Island, Essex	472	10,430	54	12	314	1,000	2,550
382. Pelham, Welland	2,703	13,038	...	16	1,186	3,464	202
383. Pembroke, Renfrew	219	2,021	....	31	.....	.....	40
384. Percy, Northumberland.....	146	13,880	125	84	6	.....	3,100
385. Perry, Parry Sound.....	677	4,778	215	10	.....	.....	.....
386. Petewawa and McKay.....	.....	1,931	108	16	.....	.....	.....
387. Pickering, Ontario.....	.....	34,522	....	13	.....	.....	8,800
388. Pilkington, Wellington.....	1,108	9,155	53	.....	26	.....	600
389. Pittsburgh, Frontenac.....	5,975	16,771	94	27	.....	.....	3,400
390. Plantagenet N., Prescott	497	19,647	302	7	.....	.....	.....
391. Plantagenet S., Prescott.....	1,136	12,553	378	2	.....	12	.....
392. Plummer Add., Algoma.....	903	2,655	....	.....	.....	.....	450
393. Plympton, Lambton	5,276	29,214	67	.....	193	.....	.....
394. Portland, Frontenac.....	2,467	12,596	12	51	.....	.....	.....
395. Prince, Algoma.....	585	515	....	.....	.....	.....	.....
396. Proton, Grey	4,067	20,303	....	3	115	1,135	2,500
397. Puslinch, Wellington	1,584	13,501	105	15	447	5,238	1,744
398. Radcliffe, Renfrew.....	147	1,571	105	.....	.....	.....	.....
399. Raglan, Renfrew.....	818	2,752	....	5	7	.....	.....
400. Rainham, Haldimand	865	9,305	168	.....	168	991	.....
401. Raleigh, Kent	.....	43,026	....	96	147	.....	19,487
402. Rama, Ontario.....	328	5,252	....	.....	.....	.....	150
403. Ramsay, Lanark.....	1,870	14,407	115	.....	251	.....	.....
404. Ratter and Dunnett, Sudbury...	10	3,023	414	14	.....	.....	.....
405. Rawdon, Hastings	629	20,129	...	64	12	.....	600
406. Rayside, Sudbury.....	1,448	2,240	35	.....	.....	.....	300
407. Reach, Ontario.....	127	17,770	....	42	.....	.....	3,100
408 Richmond, Lennox & Addington	.....	14,005	....	.....	606	.....	3,884
409. Rochester, Essex	713	17,722	225	1	34	.....	6,000
410. Rolph W. & B., Renfrew	909	2,097	108	6	28	7	.....
411. Romney, Kent.....	10	21,610	....	75	39	.....	5,774
412. Ross, Renfrew.....	1,582	8,402	....	3	.....	.....	1,600
413. Roxborough, Stormont.....	.....	30,769	294	10	.....	.....	19,422
414. Russell, Russell.....	8,868	14,642	330	10	178	.....	4,500
415. Ryde, Muskoka	411	1,719	....	10	.....	.....	.....
416. Ryerson, Parry Sound.....	152	3,913	6	.....	15	.....	400
417. St. Edmund, Bruce	566	1,868	....	9	.....	.....	.....
418. St. Joseph, Algoma	561	5,302	8	.....	.....	.....	.....
419. St. Vincent, Grey.....	657	22,669	....	.....	.....	.....	8,887
420. Salter, May & Harrow, Sudbury	654	2,994	....	.....	.....	.....	100
421. Saltfleet, Wentworth.....	1,099	22,011	54	95	397	.....	5,994
422. Sandfield, Manitoulin	431	1,117	....	.....	.....	.....	.....
423. Sandwich E., Essex.....	1,007	16,323	765	59	.....	.....	10,276
424. Sandwich S., Essex	185	13,122	101	.....	172	.....	6,096

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES.—*Continued.*

Receipts, 1907.—*Continued.*							Disbursements, 1907.					
Borrowed on debentures for schools.	Borrowed on debentures for drainage.	Borrowed on debentures for other purposes.	Premiums on debentures sold.	County grants.	Miscellaneous.	Total receipts.	Allowances, salaries and commissions.	Law costs.	Other expenses of municipal government	Roads and bridges.	Buildings and other works.	No.
$	$	$	$	$	$	$	$	$	$	$	$	
.....	.....	.....	....	.....	5	20,151	716	307	235	1,339	.....	372
.....	.....	.....	....	.....	92	16,834	554	.....	248	2,866	.....	373
.....	.....	.....	....	50	86	10,065	580	6	208	1,801	.....	374
.....	.....	.....	14	110	34	14,720	703	485	204	4,157	.....	375
.....	.....	.....	....	.....	.....	6,075	491	61	340	1,425	.....	376
.....	.....	.....	....	.....	94	12,409	421	.....	208	1,767	.....	377
.....	.....	.....	....	91	1	3,271	299	.....	44	233	.....	378
.....	.....	.....	....	.....	.....	994	189	.....	17	.....	.....	379
.....	.....	.....	....	.....	302	30,823	768	59	395	4,060	.....	380
.....	.....	.....	....	.....	.....	14,832	747	453	351	1,358	.....	381
.....	.....	.....	....	.....	96	20,705	622	5	227	3,959	.....	382
.....	.....	.....	....	.....	17	2,328	187	.....	105	222	101	383
.....	.....	.....	....	.....	.....	17,341	652	5	369	3,112	.....	384
.....	.....	.....	....	.....	158	5,838	397	.....	105	1,046	.....	385
.....	.....	.....	....	.....	6	2,061	224	15	53	32	.....	386
.....	.....	.....	....	.....	115	43,450	1,543	209	605	7,962	.....	387
.....	.....	.....	....	100	56	11,098	566	2	154	2,215	.....	388
.....	.....	.....	....	.....	46	26,313	694	89	.....	3,941	120	389
.....	.....	.....	....	.....	256	20,709	628	588	60	1,920	.....	390
.....	.....	.....	....	.....	47	14,128	757	54	110	2,469	.....	391
.....	.....	.....	....	.....	70	4,078	353	.....	73	706	.....	392
1,600	7,369	.....	25	.....	116	43,860	937	125	387	5,571	.....	393
.....	.....	.....	....	.....	304	15,430	579	3	187	3,007	.....	394
.....	.....	.....	....	.....	.....	1,100	200	14	35	178	.....	395
2,200	1,075	.....	....	.....	1,325	32,723	746	5	386	2,258	.....	396
.....	.....	.....	....	.....	184	22,818	848	40	257	3,032	217	397
.....	.....	.....	....	.....	4	1,827	143	14	49	108	.....	398
.....	.....	.....	....	.....	.....	3,582	293	1	75	203	783	399
.....	.....	.....	....	.....	6	11,503	373	.....	156	866	.....	400
.....	4,359	831	....	375	134	68,455	1,050	339	683	2,871	.....	401
700	.....	.....	....	200	87	6,717	560	.....	234	654	60	402
.....	.....	.....	....	.....	11	16,654	782	19	280	2,156	.....	403
.....	.....	.....	....	.....	.....	3,461	412	18	93	416	.....	404
.....	.....	.....	....	75	104	21,613	704	225	236	957	42	405
.....	.....	.....	....	.....	.....	4,023	281	.....	13	541	.....	406
.....	.....	.....	....	.....	164	21,203	950	.....	314	2,915	.....	407
.....	.....	.....	....	.....	132	18,627	551	884	191	2,402	.....	408
.....	1,112	.....	....	.....	493	26,300	1,013	109	403	3,458	*2,000	409
.....	.....	.....	....	.....	.....	3,155	310	.....	40	11	.....	410
.....	4,080	.....	....	90	643	32,321	1,388	149	255	1,947	.....	411
2,150	.....	.....	....	.....	804	14,541	413	8	204	3,174	.....	412
.....	18,693	.....	672	.....	410	70,270	872	81	476	2,634	.....	413
5,500	.....	.....	....	46	709	34,783	1,012	45	593	7,480	.....	414
.....	.....	.....	....	.....	5	2,145	253	11	100	416	16	415
.....	.....	.....	....	.....	36	4,522	370	18	101	1,289	.. ....	416
.....	.....	.....	....	175	10	2,628	302	32	112	400	96	417
.....	.....	1,000	....	.....	133	7,004	488	75	81	937	.....	418
2,380	.....	.....	....	.....	82	34,675	800	50	354	8,365	.....	419
.....	.....	.....	....	.....	105	3,853	404	4	108	393	.....	420
.....	.....	.....	....	.....	114	29,764	1,182	185	380	7,668	132	421
.....	.....	.....	....	.....	.....	1,548	135	5	31	188	.....	422
.....	3,312	3,037	....	45	56	34,880	1,054	208	371	10,726	300	423
.....	4,020	.....	....	.....	22	23,718	752	82	277	3,713	.....	424

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Township Municipalities.	Disbursements, 1907.— *Continued.*						
	Board of Health.	Support of the poor and other charities.	County Treasurer for levies.	Payment on account of schools and education.	Drainage works.	Sinking Fund investments and deposits.	Other investments and deposits.
	$	$	$	$	$	$	$
372. Oxford-on-Rideau	.....	5	2,673	7,004	2,317	28	.....
373. Oxford E	160	64	3,165	4,925	1,555	.....	.....
374. Oxford N	42	27	1,928	3,432	407	.....	.....
375. Oxford W	53	73	2,407	4,796	673	.....	.....
376. Paipoonge	29	10	.....	1,700	.....	671	.....
377. Pakenham	6	15	2,455	4,340	.....	.....	.....
378. Palmerston and Canonto	.....	.....	633	1,475	.....	.....	.....
379. Papineau	.....	.....	.....	679	.....	.....	.....
380. Peel	417	20	5,577	11,314	119	.....	.....
381. Pelee Island	17	.....	.....	2,015	3,126	.....	92
382. Pelham	12	51	2,809	5,596	.....	.....	3,714
383. Pembroke	5	.....	521	1,185	.....	.....	.....
384. Percy	45	102	2,661	6,553	.....	.....	.....
385. Perry	41	10	.....	2,741	.....	.....	.....
386. Petewawa and McKay	8	.....	200	943	.....	.....	.....
387. Pickering	265	229	6,903	12,908	.....	.....	.....
388. Pilkington	75	42	2,154	3,311	.....	.....	.....
389. Pittsburg	11	.....	5,124	6,493	104	.....	.....
390. Plantagenet N	345	168	1,757	11,678	118	.....	.....
391. Plantagenet S	62	17	1,674	6,745	166	57	.....
392. Plummer Additional	.....	13	.....	953	.....	.....	.....
393. Plympton	63	94	4,672	11,413	10,542	.....	.....
394. Portland	14	213	3,660	4,520	.....	.....	.....
395. Prince	.....	14	.....	560	.....	.....	.....
396. Proton	15	30	2,676	10,504	1,895	234	.....
397. Puslinch	169	97	6,649	6,133	.....	.....	5,264
398. Radcliffe	.....	.....	121	730	.....	.....	.....
399. Raglan	46	5	.....	1,885	.....	.....	.....
400. Rainham	3	95	2,953	4,550	.....	.....	995
401. Raleigh	388	447	4,636	10,139	11,575	.....	.....
402. Rama	20	28	346	3,681	.....	.....	.....
403. Ramsay	.....	36	3,567	5,391	.....	1,301	.....
404. Ratter and Dunnett	22	19	.....	2,235	.....	.....	.....
405. Rawdon	30	252	5,170	9,614	.....	.....	.....
406. Rayside	.....	.....	.....	1,989	139	.....	.....
407. Reach	70	230	4,278	8,064	.....	.....	652
408. Richmond	30	467	3,583	6,963	803	.....	269
409. Rochester	402	182	2,425	5,817	1,785	.....	.....
410. Rolph W. and B	4	.....	424	1,982	.....	128	.....
411. Romney	72	219	893	4,766	5,793	.....	.....
412 Ross	20	39	1,855	6,512	.....	.....	.....
413. Roxborough	483	183	3,002	10,040	1,112	.....	5,649
414. Russell	107	49	91	12,483	1,464	107	.....
415. Ryde	.....	5	.....	954	.....	.....	.....
416. Ryerson	36	52	.....	1,535	.....	.....	.....
417. St. Edmund	282	.....	68	1,030	.....	.....	.....
418. St. Joseph	56	208	.....	2,508	.....	170	.....
419. St. Vincent	11	55	2,511	11,462	.....	.....	.....
420. Salter, May and Harrow	.....	.....	.....	2,035	.....	80	.....
421. Saltfleet	152	431	4,305	7,567	274	545	.....
422. Sandfield	.....	32	.....	886	.....	.....	.....
423. Sandwich E	111	474	.....	4,367	6,501	.....	.....
424. Sandwich S	5	324	1,587	3,495	9,353	.....	.....

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES.—*Continued.*

Disbursements, 1907.—*Continued.*								Assets on Dec. 31, 1907.			
School debentures redeemed.	Drainage debentures redeemed.	All other debentures redeemed.	Refund of moneys borrowed for current expenses.	Interest on loans advances and debentures.	Discount on debentures sold.	Miscellaneous.	Total disbursements.	Cash in treasury.	Taxes in arrears.	Sinking Fund investments and deposits.	No.
$	$	$	$	$	$	$	$	$	$	$	
975	52	.....	3,900	320	.....	86	19,957	194	1,914	580	372
.....	923	.....	.....	240	.....	713	15,413	1,421	362	.....	373
.....	.....	.....	.....	.....	.....	247	8,678	1,387	.....	.....	374
.....	838	.....	.....	257	.....	74	14,720	.....	.....	.....	375
.....	.....	.....	.....	620	.....	320	5,667	408	8,175	1,416	376
.....	.....	674	.....	540	.....	7	10,433	1,976	486	.....	377
.....	.....	100	.....	45	.....	20	2,849	422	362	.....	378
.....	.....	.....	.....	.....	.....	20	905	89	776	.....	379
1,102	.....	486	5,043	358	.....	118	29,836	987	100	.....	380
.....	1,985	995	500	1,413	.....	4	13,056	1,776	7,203	.....	381
.....	.....	.....	1,202	19	.....	72	18,318	2,387	1,011	.....	382
.....	.....	.....	.....	.....	.....	2	2,328	.....	1,238	.....	383
.....	.....	.....	3,100	63	.....	148	16,810	531	444	.....	384
113	.....	.....	.....	30	.....	181	4,664	1,174	3,655	.....	385
.....	.....	.....	444	5	.....	27	1,951	110	317	.....	386
558	.....	.....	8,128	215	.....	507	40,032	3,418	1,876	.....	387
213	.....	.....	1,140	74	.....	52	9,998	1,100	1,802	.....	388
.....	.....	.....	2,000	52	.....	322	18,950	7,363	865	.....	389
90	.....	.....	1,000	334	.....	83	18,769	1,940	6,494	.....	390
.....	23	.....	.....	81	.....	222	12,437	1,691	5,539	299	391
337	.....	.....	450	255	.....	21	3,161	917	689	.....	392
593	3,877	.....	.....	917	.....	142	39,333	4,527	10,831	.....	393
.....	.....	.....	.....	214	.....	639	13,036	2,394	533	.....	394
.....	.....	.....	.....	.....	.....	35	1,036	64	3,400	.....	395
574	1,914	.....	2,715	732	.....	948	25,632	7,091	2,165	1,769	396
.....	.....	.....	.....	2	.....	42	22,750	68	3,621	.....	397
.....	.....	.....	.....	.....	.....	.....	1,165	662	1,003	.....	398
.....	.....	.....	.....	.....	.....	2	3,293	289	2,528	.....	399
.....	.....	.....	.....	.....	.....	380	10,371	1,132	3	.....	400
.....	13,622	645	16,394	3,887	.....	1,675	68,351	104	39,313	.....	401
.....	.....	.....	500	51	.....	30	6,164	553	1,682	.....	402
.....	.....	.....	.....	460	.....	200	14,195	2,459	54	8,749	403
113	.....	.....	.....	73	.....	54	3,455	6	1,586	.....	404
509	.....	.....	600	175	.....	125	18,639	2,974	4,915	.....	405
.....	.....	.....	1,000	9	.....	.....	3,972	51	2,129	.....	406
.....	.....	.....	3,464	88	.....	133	21,158	45	75	.....	407
.....	.....	.....	2,297	76	.....	111	18,627	.....	7,183	.....	408
302	3,260	168	2,000	919	.....	882	25,125	1,175	13,651	.....	409
.....	.....	.....	.....	56	.....	12	2,967	188	2,655	885	410
196	6,813	1,399	6,323	1,929	.....	179	32,321	.....	15,588	.....	411
.....	.....	170	873	101	.....	40	13,409	1,132	3,908	.....	412
55	6,636	.....	34,110	4,780	.....	157	70,270	.....	23,737	.....	413
350	2,790	.....	4,000	2,022	.....	1,048	33,641	1,142	9,193	3,618	414
136	.....	.....	.....	47	.....	.....	1,938	207	1,334	.....	415
41	.....	.....	800	40	.....	28	4,310	212	2,217	.....	416
.....	.....	.....	.....	.....	.....	199	2,521	107	3,252	.....	417
126	.....	46	100	267	40	*1,146	6,248	756	1,921	840	418
546	.....	.....	8,887	478	.....	175	33,694	981	131	.....	419
.....	.....	....	100	77	.....	44	3,245	608	240	950	420
.....	.....	.....	5,000	656	.....	1,287	29,764	.....	1,191	4 016	421
.....	.....	.....	.....	.....	.....	.....	1,277	271	112	.....	422
.....	1,633	...	8,276	668	.....	144	34.863	17	18,949	.....	423
.. ...	3.198	.....	.....	875	.....	57	23,718	.....	11,301	.....	424

*Including $1,000 bonus to mill.

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Township Municipalities.	Assets on December 31st, 1907.—*Continued.*			
	All other investments and deposits.	Other property.	Miscellaneous.	Total assets.
	$	$	$	$
372. Oxford-on-Rideau	.....	6,000	525	9,213
373. Oxford E	.....	600	342	2,725
374. Oxford N	.....	250	30	1,667
375. Oxford W	.....	500	2,605	3,105
376. Paipoonge	.....	3,285	4,400	17,684
377. Pakenham	.....	1,300	.....	3,762
378. Palmerston and Canonto	.....	200	.....	984
379. Papineau	.....	.....	.....	865
380. Peel	.....	.....	1,414	2,501
381. Pelee Island	4,156	200	†25,626	38,961
382. Pelham	17,779	5,500	831	27,508
383. Pembroke	.....	150	.....	1,388
384. Percy	.....	8,400	.....	9,375
385. Perry	.....	.....	483	5,312
386. Petewawa and McKay	.....	.....	.....	427
387. Pickering	.....	2,900	878	9,072
388. Pilkington	.....	.....	1,275	4,177
389. Pittsburgh	.....	2,515	408	11,151
390. Plantagenet N	.....	2,339	2,238	13,011
391. Plantagenet S	.....	800	351	8,680
392. Plummer Additional	.....	170	4,234	6,010
393. Plympton	.....	1,350	3,432	20.140
394. Portland	1,750	1,000	.....	5,677
395. Prince	.....	200	.....	3,664
396. Proton	.....	.....	6,250	17,275
397. Puslinch	10,093	2,500	.....	16,282
398. Radcliffe	.....	.....	.....	1,665
399. Raglan	.....	.....	.....	2,817
400. Rainham	4,645	750	.....	6,530
401. Raleigh	.....	1,100	14,170	54,687
402. Rama	.....	1,100	700	4,035
403. Ramsay	*8,074	.....	500	19,836
404. Ratter and Dunnett	.....	.....	1,263	2,855
405. Rawdon	10	1,200	3,014	12,113
406. Rayside	.....	400	.....	2,580
407. Reach	652	1,920	48	2,740
408. Richmond	17,784	3,100	.....	28,067
409. Rochester	.....	2,000	2,497	19,323
410. Rolph W. and B	.....	100	515	4,343
411. Romney	.....	1,000	6,225	22,813
412. Ross	.....	425	2,150	7,615
413. Roxborough	8,797	500	3,049	36,083
414. Russell	.....	1,000	8,335	23,318
415. Ryde	.....	2,175	642	4,358
416. Ryerson	.....	250	195	2,874
417. St. Edmunds	.....	.....	.....	3,359
418. St. Joseph	.....	1,500	1,895	6,912
419. St Vincent	.....	.....	6,031	7,143
420. Salter, May and Harrow	.....	200	550	2,548
421. Saltfleet	6,000	2,800	5,984	19,991
422. Sandfield	.....	.....	.....	383
423. Sandwich E	.....	800	437	20,203
424. Sandwich S	.....	1,500	6,884	19,685

* Omitting $726 decrease in value of bank stock.

† Including $25,000 in marsh drainage system.

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES.—*Continued.*

Liabilities on December 31st, 1907.										
County levy.	Local school rates.	Railway debentures.	School debentures.	Drainage debentures.	All other debentures.	Loans for current expenses and interest.	Due Sinking Fund.	Miscellaneous.	Total liabilities.	No.
$	$	$	$	$	$	$	$	$	$	
.....	.....	.....	525	1,552	.....	.....	.....	588	2,665	372
.....	23	.....	.....	4,167	.....	.....	.....	1,337	5,527	373
.....	.....	.....	.....	.....	.....	.....	.....	1,922	1,922	374
.....	.....	.....	.....	2,079	.....	1,140	.....	.....	3,219	375
.....	1,800	.....	4,400	.....	7,000	.....	.....	2,960	16,160	376
.....	.....	.....	.....	.....	12,825	.....	.....	.....	12,825	377
.....	74	.....	.....	.....	800	.....	.....	11	885	378
.....	480	.....	.....	.....	.....	.....	.....	44	524	379
.....	.....	1,042	1,401	.....	.....	.....	.....	.....	2,443	380
309	1,751	.....	.....	14,859	3,295	6,834	.....	358	27,406	381
.....	1,043	.....	.....	.....	.....	.....	.....	1,175	2,218	382
.....	.....	.....	.....	.....	.....	40	.....	.....	40	383
.....	.....	.....	.....	.....	.....	.....	.....	86	86	384
.....	2,819	.....	383	.....	.....	.....	.....	147	3,349	385
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	386
.....	20	.....	382	.....	.....	2,900	.....	.....	3,302	387
.....	1,869	.....	1,221	.....	.....	832	.....	470	4,392	388
5,124	.....	.....	.....	.....	.....	2,560	.....	117	7,801	389
2,387	4,112	.....	2,238	.....	.....	.....	.....	586	9,323	390
2,415	3,874	.....	650	26	.....	.....	.....	185	7,150	391
.....	1,011	.....	4,234	.....	.....	.....	.....	.....	5,245	392
3,343	.....	.....	2,084	19,473	.....	.....	.....	175	25,075	393
3,660	.....	.....	.....	.....	.....	.....	.....	600	4,260	394
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	395
.....	.....	.....	6,250	8,915	.....	.....	.....	160	15,325	396
.....	464	.....	.....	.....	.....	1,744	.....	115	2,323	397
.....	420	.....	.....	.....	.....	.....	.....	760	1,180	398
199	2,002	.....	.....	.....	.....	.....	.....	109	2,310	399
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	400
.....	.....	6,110	.....	64,397	1,880	19,487	.....	.....	91,874	401
421	.....	.....	700	.....	.....	979	.....	.....	2,100	402
.....	325	.....	.....	.....	11,500	.....	.....	.....	11,825	403
.....	674	.....	1,263	.....	.....	.....	.....	35	1,972	404
6,117	.....	.....	2,837	.....	.....	.....	.....	.....	8,954	405
.....	769	.....	.....	.....	.....	.....	.....	.....	769	406
.....	.....	.....	.....	.....	.....	.....	.....	190	190	407
4,118	.....	.....	.....	.....	.....	5,484	.....	.....	9,602	408
2,425	4,313	.....	877	16,008	762	4,000	.....	2,381	30,766	409
.....	1,500	.....	1,400	.....	.....	.....	.....	347	3,247	410
1,184	587	7,051	4,091	18,323	6,366	5,774	.....	1,520	44,896	411
2,120	.....	.....	2,150	.....	1,667	1,600	.....	.....	7,537	412
4,978	4,498	.....	114	78,044	.....	8,414	.....	8,797	104,845	413
2,841	1,723	10,000	5,150	33,352	.....	500	.....	7,850	61,416	414
.....	500	.....	642	.....	.....	.....	.....	100	1,242	415
.....	1,481	.....	188	.....	.....	.....	.....	72	1,741	416
.....	.....	.....	.....	.....	.....	.....	.....	115	115	417
.....	.....	.....	1,895	.....	1,954	.....	.....	300	4,149	418
.....	.....	.....	6,017	.....	.....	.....	.....	217	6,234	419
.....	410	.....	1,500	.....	.....	.....	.....	.....	1,910	420
.....	.....	.....	10,000	.....	.....	994	.....	.....	10,994	421
.....	.....	.....	.....	.....	.....	.....	.....	2	2	422
2,418	5,500	.....	.....	16,971	4,045	4,000	.....	.....	32,934	423
.....	2,582	.....	.....	17,082	.....	6,096	.....	3,328	29,088	424

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

	Township Municipalities and Counties in which located.	Receipts, 1907.						
		Balance from 1906.	Municipal and school taxes.	Licenses.	Fees, rents, fines, etc.	Interest and dividends.	Refund of money invested.	Borrowed for current expenses.
		$	$	$	$	$	$	$
425.	Sandwich W., Essex	447	13,845	563	.....	6	.....	5,793
426.	Sarawak, Grey	2,431	7,515	....	3	503	2,088	.....
427.	Sarnia, Lambton	56	18,004	....	.....	12	.....	3,000
428.	Saugeen, Bruce	1,267	8,809	....	.....	21	.....	750
429.	Scarborough, York	162	24,007	206	1	551	.....	124
430.	Schreiber, Thunder Bay	189	2,851	94	.....	.....	.....	1,650
431.	Scott, Ontario	924	12,791	....	.....	257	.....	2,500
432.	Scugog, Ontario	241	2,640	...	49	.....	.....	100
433.	Sebastopol, Renfrew	331	1,520	39	5	.....	.....	.....
434.	Seneca, Haldimand	1,303	13,398	96	17	25	.....	960
435.	Seymour, Northumberland	1,169	14,921	38	25	11	.....	6,329
436.	Sheffield, Lennox and Addington	1,018	9,337	209	16	.....	.....	.....
437.	Sherborne, McClintock, etc., Halib'n	331	1,354	63	38	.....	.....	.....
438.	Sherbrooke, Haldimand	208	1,391	72	.....	54	136	521
439.	Sherbrooke S, Lanark	229	2,399	....	6	.....	.....	.....
440.	Shuniah, Thunder Bay	12	5,201	....	.....	262	100	1,000
441.	Sidney, Hastings	4,237	23,671	162	1	33	.....	2,000
442.	Smith, Peterborough	1,854	16,192	....	.....	59	.....	.....
443.	Snowdon, Haliburton	35	2,152	.....	.....	.....	.....	317
444.	Sombra, Lambton	573	27,186	281	43	48	.....	.....
445.	Somerville, Victoria	24	9,532	90	31	376	300	615
446.	Sophiasburg, Prince Edward	741	11,793	....	35	121	.....	200
447.	Southwold, Elgin	848	34,218	....	104	7	.....	5,500
448.	Springer, Nipissing	976	2,723	....	.....	.....	.....	3,432
449.	Stafford, Renfrew	579	3,629	....	.....	.....	.....	.....
450.	Stamford, Welland	2,419	15,656	221	130	127	.....	12,353
451.	Stanhope, Haliburton	276	1,665	....	.....	.....	.....	.....
452.	Stanley, Huron	493	15,441	.....	.....	16	.....	2,800
453.	Stephen, Huron	8,761	23,651	395	21	68	410	5,350
454.	Stephenson, Muskoka	97	3,008	45	36	5	.....	326
455.	Stisted, Muskoka	463	2,335	4	17	15	30	.....
456.	Storrington, Frontenac	643	11,033	4	6	.....	.....	500
457.	Strong, Parry Sound	293	2,754	4	16	.....	.....	500
458.	Sullivan, Grey	5,277	16,098	21	16	67	.....	700
459.	Sunnidale, Simcoe	4,054	11,162	68	12	9	.....	3,500
460.	Sydenham, Grey	258	20,853	....	1	.....	.....	6,200
461.	Tarentorus and Rankin, Algoma	535	4,598	.....	.....	.....	.....	1,000
462.	Tay, Simcoe	4,592	16,954	198	10	148	.....	.....
463.	Tecumseth, Simcoe	2,968	22,016	...	.....	50	.....	2,300
464.	Tebkummah, Manitoulin	670	2,455	4	.....	.....	.....	.....
465.	Thessalon, Algoma	467	2,784	1	.....	.....	.....	.....
466.	Thompson, Algoma	487	750	....	10	.....	.....	.....
467.	Thorah, Ontario	105	8,626	....	14	1,499	224	1,800
468.	Thorold, Welland	1,162	8,939	221	91	16	.....	.....
469.	Thurlow Hastings	1,546	21,309	180	10	.....	.....	6,016
470.	Tilbury E., Kent	261	46,971	....	26	.....	.....	24,935
471.	Tilbury N., Essex	4,413	8,002	218	.....	90	.....	2,483
472.	Tilbury W., Essex	3,127	16,861	236	7	177	.....	.....
473.	Tiny, Simcoe	233	15,869	67	.....	11	.....	5,351
474.	Torbolton, Carleton	499	3,912	.....	.....	.....	.....	600
475.	Toronto, Peel	2,480	30,666	225	12	1,057	15,376	5,000
476.	Toronto Gore, Peel	255	8,358	45	2	161	31	2,027

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Receipts, 1906.—*Continued.*							Disbursements, 1907.					
Borrowed on debentures for schools.	Borrowed on debentures for drainage.	Borrowed on debentures for other purposes.	Premiums on debentures sold.	County grants.	Miscellaneous.	Total receipts.	Allowances, salaries and commissions.	Law costs.	Other expenses of municipal government.	Roads and bridges.	Buildings and other works.	No.
$	$	$	$	$	$	$	$	$	$	$	$	
.....	5,109	2,995	16	.....	221	28,995	604	147	287	2,587	.....	425
.....	.....	.....	.....	.....	65	12,605	563	12	252	1,373	.....	426
.....	2,085	.....	14	.....	430	23,601	895	368	326	5,437	400	427
.....	.....	.....	....	300	125	11,272	520	11	183	2,793	.....	428
.....	.....	.....	.....	.....	149	25,200	1,455	24	553	6,800	.....	429
.....	.....	.....	.....	.....	500	5,284	130	.....	55	30	1,250	430
.....	.....	.....	.....	.....	76	16,548	900	.....	205	3,053	.....	431
.....	.....	.....	.....	.....	.....	3,030	173	.....	60	350	18	432
.....	.....	.....	.....	.....	.....	1,895	189	.....	27	18	.....	433
.....	.....	.....	.....	.....	30	15,829	538	27	172	2,666	.....	434
.....	.....	.....	.....	.....	11	22,504	875	43	234	5,433	.....	435
.....	.....	.....	.....	.....	93	10,673	623	2	263	1,098	.....	436
.....	.....	.....	.....	.....	347	2,133	283	86	157	282	....	437
.....	.....	.....	.....	.....	10	2,392	91	.....	32	183	.....	438
.....	.....	.....	.....	.....	.....	2,634	241	.....	130	267	.....	439
.....	.....	.....	.....	.....	366	6,575	680	218	451	2,080	.....	440
.....	.....	.....	.....	.....	15	30,119	1,057	90	359	3,772	.....	441
.....	.....	.....	.....	.....	25	18,130	783	.....	236	4,045	.....	442
.....	.....	.....	.....	.....	30	2,534	257	.....	108	229	.....	443
.....	17,417	.....	....	200	*12,733	58,481	946	417	307	5,956	104	444
250	.....	.....	.....	.....	369	11,587	783	222	184	1,212	.....	445
.....	.....	.....	.....	.....	23	12,913	531	1	246	729	363	446
.....	408	.....	....	25	27	41,137	1,386	47	415	10,808	....	447
.....	.....	.....	.....	.....	213	7,344	394	.....	46	329	.....	448
.....	.....	.....	.....	.....	111	4,319	233	2	136	726	....	449
.....	.....	.....	.....	.....	311	31,217	977	105	541	12,719	.....	450
.....	.....	.....	.....	.....	109	2,050	221	.....	80	431	.....	451
.....	.....	.....	....	20	97	18,867	695	31	248	4,957	63	452
1,800	.....	.....	.....	.....	524	40,980	770	.....	529	4,233	.....	453
.....	.....	.....	.....	.....	111	3,628	358	6	148	766	....	454
.....	.....	.....	.....	.....	15	2,879	323	.....	52	539	.....	455
.....	.....	.....	....	.....	29	12,215	501	.....	56	2,575	.....	456
.....	.....	.....	.....	.....	350	3,917	307	12	63	1,507	.....	457
.....	.....	.....	.....	.....	250	22,432	648	2	302	2,396	.....	458
.....	.....	.....	...	114	205	19,124	952	100	265	1,705	.....	459
.....	.....	.....	.....	.....	182	27,494	1,034	24	543	6,200	40	460
.....	.....	.....	.....	.....	340	6,473	896	.....	555	2,899	194	461
.....	.....	.....	....	412	94	22,408	1,000	14	379	3,271	2,362	462
.....	.....	.....	.....	.....	62	27,396	792	.....	292	6,461	.....	463
.....	.....	.....	.....	.....	450	3,579	222	14	65	1,013	.....	464
.....	.....	.....	.....	.....	.....	3,252	314	5	105	506	.....	465
.....	.....	.....	.....	....	30	1,277	123	.....	26	93	.....	466
.....	.....	.....	.....	.....	80	12,348	755	20	179	3,491	.....	467
.....	.....	.....	.....	.....	115	10,544	646	32	426	1,926	250	468
.....	.....	.....	....	25	.....	29,086	803	.....	422	1,674	.....	469
.....	.....	.....	....	5,513	†2,238	79,944	1,955	336	615	5,422	.....	470
.....	899	.....	.....	.....	134	16,239	883	.....	338	1,979	.....	471
.....	918	.....	.....	.....	1,454	22,780	1,197	48	548	1,846	.....	472
1,700	.....	.....	.....	.....	297	23,528	1,104	6	243	4,352	90	473
.....	.....	.....	.....	.....	.....	5,011	263	25	101	909	.....	474
.....	.....	.....	....	193	198	55,207	1,330	121	560	7,896	.....	475
.....	.....	.....	.....	.....	256	11,135	519	.....	151	2,573	....	476

* Including $8,734 received from Chatham and Moore tps. as share of drainage expenditures, and $4,000 grant from Government for aid to drains.

† Including sales of cement pipes and tile, $1,361.

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Township Municipalities.	Disbursements, 1907.—*Continued.*						
	Board of Health.	Support of the poor and other charities.	County Treasurer for levies.	Payment on account of schools and education.	Drainage works.	Sinking Fund, investments and deposits.	Other investments and deposits.
	$	$	$	$	$	$	$
425. Sandwich W.	1,265	122	2,269	5,614	9,028	.....	.....
426. Sarawak	48	86	685	2,865	.....	973	5
427. Sarnia	17	226	2,132	5,356	2,544	.....	.....
428. Saugeen	8	.....	1,983	3,261	56	.....	.....
429. Scarborough	68	28	4,828	9,653	.....	.....	.....
430. Schreiber	.....	.....	.....	1,911	.....	.....	.....
431. Scott	94	136	2,652	5,491	.....	.....	.....
432. Scugog	.....	5	659	1,501	.....	.....	.....
433. Sebastopol	4	.....	419	1,066	.....	.....	.....
434. Seneca	52	5	3,805	6,751	.....	.....	.....
435. Seymour	46	24	3,512	6,143	.....	.....	.....
436. Sheffield	10	151	2,252	4,425	.....	.....	.....
437. Sherborne, McClintock, etc.	.....	.....	113	564	.....	.....	.....
438. Sherbrooke	.....	.....	518	972	.....	.....	.....
439. Sherbrooke S.	.....	5	403	1,518	.....	.....	.....
440. Shuniah	.....	20	.....	508	.....	262	.....
441. Sidney	61	246	8,955	11,150	.....	.....	.....
442. Smith	40	167	4,764	6,214	.....	.....	.....
443. Snowdon	25	.....	420	1,487	.....	.....	.....
444. Sombra	166	511	3,010	8,705	29,901	.....	.....
445. Somerville	28	66	1,762	4,117	.....	687	.....
446. Sophiasburg	26	7	4,763	5,559	.....	.....	.....
447. Southwold	330	11	8,871	10,426	488	.....	.....
448. Springer	6	.....	.....	1,883	.....	.....	332
449. Stafford	9	.....	1,031	1,827	131	.....	.....
450. Stamford	100	522	2,414	4,258	.....	.....	.....
451. Stanhope	.....	5	.....	656	.....	.....	.....
452. Stanley	23	92	3,478	4,956	86	.....	.....
453. Stephen	493	105	9,390	10,851	3,691	.....	88
454. Stephenson	20	.....	.....	2,116	.....	5	.....
455. Stisted	39	.....	.....	1,566	.....	.....	.....
456. Storrington	.....	.....	3,994	4,170	.....	.....	.....
457. Strong	.....	5	.....	1,202	.....	.....	.....
458. Sullivan	80	24	2,920	9,288	.....	.....	.....
459. Sunnidale	59	88	2,385	4,581	810	.....	.....
460. Sydenham	113	87	3,313	8,433	.....	.....	.....
461. Tarentorus	11	24	.....	887	.....	.....	.....
462. Tay	49	126	2,842	8,991	.....	.....	.....
463. Tecumseth	13	415	5,737	8,890	.....	.....	.....
464. Tehkummah	.....	5	1,732	.....	.....	.....	.....
465. Thessalon	.....	5	.....	1,370	.....	.....	.....
466. Thompson	.....	.....	.....	525	30	.....	.....
467. Thorah	2	57	2,010	2,489	236	228	.....
468. Thorold	20	18	2,014	4,594	.....	.....	.....
469. Thurlow	677	1,119	6,230	9,841	.....	.....	.....
470. Tilbury E.	25	558	1,816	7,853	12,073	.....	.....
471. Tilbury N.	37	244	1,870	4,114	2,150	.....	.....
472. Tilbury W.	36	115	1,813	3,320	5,908	.....	.....
473. Tiny	42	101	.....	8,967	.....	.....	.....
474. Torbolton	.....	.....	625	1,931	.....	.....	.....
475. Toronto	498	57	7,531	12,092	.....	.....	15,345
476. Toronto Gore	22	51	2,200	2,707	.....	.....	30

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Disbursements, 1907.—*Continued.*								Assets on December 31, 1907			
School debentures redeemed.	Drainage debentures redeemed.	All other debentures redeemed.	Refund of moneys borrowed for current expenses.	Interest on loans, advances and debentures.	Discount on debentures sold.	Miscellaneous.	Total disbursements.	Cash in treasury.	Taxes in arrears.	Sinking Fund investments and deposits.	No.
$	$	$	$	$	$	$	$	$	$	$	
.....	597	.....	3,795	295	.....	432	27,042	1,953	15,349	.....	425
257	.....	934	1	643	.....	477	9,174	3,431	647	5,415	426
374	3,644	.....	.....	1,293	.....	237	23,249	352	3,385	.....	427
.....	56	.....	750	46	.....	79	9,746	1,526	12	.....	428
544	.....	.....	432	470	.....	75	24,930	270	1,440	.....	429
130	.....	.....	650	355	.....	.....	4,511	773	191	.....	430
.....	.....	.....	2,500	71	.....	122	15,224	1,324	36	.....	431
.....	.....	.....	100	2	.....	10	2,878	152	.....	.....	432
.....	.....	.....	.....	.....	.....	.....	1,723	172	82	.....	433
.....	.....	.....	960	12	.....	161	15,149	680	110	.....	434
.....	.....	.....	5,590	110	.....	494	22,504	.....	2,057	.....	435
.....	.....	376	.....	255	.....	98	9,553	1,120	1,423	.....	436
63	.....	.....	.....	53	.....	399	2,000	133	461	.....	437
.....	.....	.....	131	.....	.....	435	2,362	30	249	.....	438
.....	.....	.....	.....	.....	.....	3	2,567	67	571	.....	439
.....	.....	.....	1,000	396	.....	356	5,971	604	3,017	4,613	440
.....	.....	.....	2,000	42	.....	164	27,896	2,223	12,392	.....	441
466	.....	.....	.....	55	.....	26	16,796	1,334	1,309	.....	442
.....	.....	.....	.....	.....	.....	8	2,534	.....	1,880	.....	443
268	5,365	.....	.....	1,927	.....	274	57,857	624	28,131	.....	444
404	.....	.....	.....	589	.....	109	10,163	1,424	5,391	9,997	445
.....	.....	.....	200	2	.....	22	12,449	464	816	.....	446
255	1,255	.....	5,500	372	.....	422	40,586	551	2,024	.....	447
.....	.....	141	2,991	345	.....	106	6,573	771	4,664	.....	448
.....	.....	.....	.....	.....	.....	10	4,105	214	819	.....	449
479	.....	244	8,000	524	.....	334	31,217	.....	2,038	.....	450
103	.....	.....	100	28	.....	17	1,641	409	842	.....	451
.....	550	.....	3,115	166	.....	22	18,482	385	3	.....	452
450	1,077	119	5,718	815	.....	434	38,763	2,217	927	.....	453
.....	.....	.....	.....	40	.....	169	3,628	.....	1,731	303	454
38	.....	.....	.....	7	.....	81	2,645	234	1,537	.....	455
.....	.....	.....	500	8	.....	7	11,811	404	1,136	.....	456
.....	.....	.....	125	8	.....	61	3,290	627	1,159	.....	457
50	.....	.....	700	19	.....	55	16,484	5,948	116	.....	458
88	267	.....	3,500	268	.....	39	15,107	4,017	.....	.....	459
64	.....	.....	6,700	250	.....	84	26,885	609	63	.....	460
.....	.....	.....	591	15	.....	189	6,261	212	5,515	.....	461
465	.....	.....	.....	121	.....	955	20,575	1,833	10,162	.....	462
.....	413	.....	2,300	335	.....	104	25,752	1,644	684	.....	463
.....	.....	.....	.....	.....	.....	5	3,056	523	824	.....	464
108	.....	100	.....	158	.....	102	2,773	479	1,411	.....	465
.....	.....	.....	100	13	.....	1	911	366	1,143	.....	466
.....	.....	1,000	1,300	177	.....	378	12,322	26	653	228	467
.....	.....	.....	.....	.....	.....	158	10,084	460	4,127	.....	468
472	.....	.....	6,016	121	.....	373	27,748	1,338	8,651	.....	469
407	13,011	632	26,559	8,421	.....	211	79,894	50	40,539	.....	470
.....	2,773	.....	.....	1,327	.....	356	16,071	168	12,220	.....	471
209	5,199	636	.....	963	.....	243	22,081	699	13,600	.....	472
.....	199	796	3,550	1,803	.....	41	21,294	2,234	9,767	.....	473
.....	.....	.....	513	.....	.....	6	4,373	638	2,821	.....	474
172	.....	.....	5,000	116	.....	925	51,643	3,564	1,265	.....	475
.....	.....	253	2,027	95	.....	70	10,698	437	.....	.....	476

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS

Township Municipalities.	Assets on December 31st, 1907.—*Continued.*			
	All other investments and deposits.	Other property.	Miscellaneous.	Total assets.
	$	$	$	$
425. Sandwich W	.....	1,000	.....	18,302
426. Sarawak	1,352	466	2,215	13,526
427. Sarnia	.....	2,000	2,177	7,914
428. Saugeen	.....	.....	465	2,003
429. Scarborough	13,129	1,110	5,264	21,213
430. Schreiber	.....	1,600	5,522	8,086
431. Scott	4,761	930	.....	7,051
432. Scugog	.....	1,470	.....	1,622
433. Sebastopol	.....	.....	.....	254
434. Seneca	.....	2,000	.....	2,790
435. Seymour	.....	.....	273	2,330
436. Sheffield	.....	2,000	.....	4,543
437. Sherborne, McClintock, etc	.....	909	853	2,356
438. Sherbrooke	1,862	500	.....	2,641
439. Sherbrooke S	.....	.....	.....	638
440. Shmniah	197	.....	33	8,464
441. Sidney	.....	1,000	.....	15,615
442. Smith	.....	.....	467	3,110
443. Snowdon	.....	120	.....	2,000
444. Sombra	.....	3,100	7,407	39,262
445. Somerville	.....	.....	1,912	18,724
446. Sophiasburg	3,418	3,500	.....	8,198
447. Southwold	.....	775	1,700	5,050
448. Springer	332	.....	880	6,647
449. Stafford	.....	565	.....	1,598
450. Stamford	.....	9,000	2,968	14,006
451. Stanhope	.....	.....	1,000	2,251
452. Stanley	.....	1,211	446	2,075
453. Stephen	88	1,500	9,364	14,096
454. Stephenson	.....	1,250	922	4,206
455. Stisted	120	250	112	2,253
456. Storrington	.....	1,000	.....	2,540
457. Strong	.....	657	.....	2,443
458. Sullivan	.....	1,975	156	8,195
459. Sunnidale	.....	600	1,474	6,091
460. Sydenham	.....	550	1,946	3,168
461. Tarentorus and Rankin	.....	775	.....	6,502
462. Tay	.....	410	2,240	14,645
463. Tecumseth	.....	.....	6,454	8,782
464. Tehkummah	.....	.....	.....	1,347
465. Thessalon	.....	1,365	236	3,491
466. Thompson	.....	250	.....	1,759
467. Thorah	50,000	1,275	.....	52,182
468. Thorold	.....	.....	.....	4,587
469. Thurlow	.....	2,000	494	12,483
470. Tilbury E	.....	4,560	19,320	64,469
471. Tilbury N	.....	.....	716	13,104
472. Tilbury W	.....	2,000	4,148	20,747
473. Tiny	.....	.....	6,496	18,497
474. Torbolton	.....	.....	.....	3,459
475. Toronto	28,825	2,155	719	36,528
476. Toronto Gore	3,530	1,018	.....	4,985

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Liabilities on December 31st, 1907.										
County levy.	Local school rates.	Railway debentures.	School debentures.	Drainage debentures.	All other debentures.	Loans for current expenses and interest.	Due Sinking Fund.	Miscellaneous.	Total liabilities.	No.
$	$	$	$	$	$	$	$	$	$	
2,127	6,720	.....	.....	9,869	2,995	5,793	.....	1,851	29,355	425
.....	.....	7,500	1,157	.....	5,281	.....	240	100	14,278	426
.....	108	.....	1,433	21,868	.....	3,000	.....	822	27,231	427
.....	.....	.....	.....	815	.....	.....	.....	5	820	428
.....	.....	.....	5,264	.....	.....	124	.....	.....	5,388	429
.....	.....	.....	5,522	.....	.....	1,000	.....	.....	6,522	430
.....	.....	.....	.....	385	.....	.....	.....	.....	385	431
.....	.....	.....	.....	.....	.....	.....	.....	25	25	432
.....	.....	.....	.....	.....	.....	.....	.....	8	8	433
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	434
.....	.....	.....	.....	.....	.....	.....	.....	373	373	435
.....	758	.....	.....	.....	5,870	.....	.....	594	7,222	436
.....	887	.....	837	.....	.....	.....	.....	252	1,976	437
.....	.....	.....	.....	.....	.....	390	.....	.....	390	438
.....	.....	.....	.....	.....	.....	.....	.....	109	109	439
.....	.....	.....	.....	.....	7,500	3,925	.....	654	12,079	440
10,594	1,385	.....	.....	.....	.....	.....	.....	.....	11,979	441
.....	.....	.....	467	.....	.....	.....	.....	.....	467	442
100	800	.....	.....	.....	.....	317	.....	.....	1,217	443
2,847	10,514	.....	1,239	51,420	.....	.....	.....	5,351	71,371	444
.....	3,293	10,000	1,893	.....	.....	262	504	102	16,054	445
.....	103	.....	.....	.....	.....	.....	.....	133	236	446
.....	80	.....	1,145	3,803	.....	.....	.....	1,101	6,129	447
.....	2,109	.....	.....	.....	1,858	3,432	.....	671	8,070	448
.....	109	.....	.....	.....	.....	.....	.....	94	203	449
.....	2,356	.....	2,779	.....	2,756	4,353	.....	1,134	13,378	450
93	790	.....	927	.....	.....	.....	.....	45	1,855	451
.....	.....	.....	.....	1,650	.....	.....	.....	717	2,367	452
.....	.....	.....	9,000	4,873	120	.....	.....	.....	13,993	453
.....	652	.....	1,000	.....	.....	332	.....	517	2,501	454
.....	.....	.....	112	.....	.....	.....	.....	.....	112	455
.....	220	.....	.....	.....	.....	.....	.....	69	289	456
.....	1,006	.....	.....	.....	.....	512	.....	.....	1,518	457
.....	.....	.....	150	.....	.....	.....	.....	175	325	458
2,478	1,193	.....	864	3,152	.....	.....	.....	.....	7,687	159
.....	.....	.....	1,876	.....	.....	.....	.....	53	1,929	460
.....	.....	.....	.....	.....	.....	500	.....	698	1,198	461
2,632	5,949	.....	2,240	.....	.....	.....	.....	300	11,121	462
255	.....	.....	.....	6,454	.....	.....	.....	.....	6,709	463
.....	381	.....	.....	.....	.....	.....	.....	11	392	464
.....	.....	.....	236	.....	2,714	.....	.....	30	2,980	465
.....	.....	.....	.....	.....	.....	100	.....	65	165	466
.....	394	1,000	.....	.....	.....	1,000	.....	.....	2,394	467
.....	2,786	.....	.....	.....	.....	.....	.....	1,188	3,974	468
9,664	873	.....	494	.....	.....	.....	.....	183	11,214	469
2,419	5,532	3,056	447	129,374	3,232	24,935	.....	2,202	171,197	470
1,870	2,038	.....	.....	24,453	.....	2,483	.....	717	31,561	471
1,971	4,677	.....	220	17,529	2,390	.....	.....	448	27,235	472
2,679	.....	39,781	1,700	1,627	.....	5,526	.....	.....	51,313	473
825	1,241	.....	.....	.....	.....	615	.....	369	3,050	474
.....	.....	.....	719	.....	.....	.....	.....	.....	719	475
.....	.....	.....	.....	.....	1,119	.....	.....	66	1,185	476

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Township Municipalities and Counties in which located.	Receipts, 1907.						
	Balance from 1906.	Municipal and school taxes.	Licenses.	Fees, rents, fines, etc.	Interest and dividends.	Refund of money invested.	Borrowed for current expenses.
	$	$	$	$	$	$	$
477. Tossorontio, Simcoe	889	7,772	153	.....	.....	.....	393
478. Townsend, Norfolk	3,753	21,424	....	33	146	.....	66
479. Trafalgar, Halton	289	23,958	....	.....	2,143	.....	12,110
480. Tuckersmith, Huron	1,009	17,717	96	126	1,057	.....	.....
481. Tudor and Cashel, Hastings	317	3,782	60	5	.....	.....	.....
482. Turnberry, Huron	546	11,687	42	5	36	.....	1,200
483. Tyendinaga, Hastings	2,481	20,133	225	5	29	.....	.....
484. Usborne, Huron	2,025	20,869	....	2	20	.....	2,807
485. Uxbridge, Ontario	121	13,739	126	21	595	.....	4,333
486. Van Horne, Kenora	727	1,419	51	81	.....	.....	.....
487. Vaughan, York	8,502	23,605	....	.....	1,384	15,046	.....
488. Vernlam, Victoria	1,198	12,145	....	.....	112	.....	.....
489. Vespra, Simcoe	4,412	12,385	....	.....	33	.....	.....
490. Wainfleet, Welland	.....	14,227	96	205	845	.....	9,915
491. Wallace, Perth	2,087	17,351	55	4	348	9,691	1,800
492. Walpole, Haldimand	1,547	27,807	216	32	48	.....	3,500
493. Walsingham N., Norfolk	2,118	10,617	....	13	51	.....	1,000
494. Walsingham S., Norfolk	.....	13,758	90	7	3	.....	5,575
495. Warwick, Lambton	2,143	22,690	....	13	19	.....	6,455
496. Waterloo, Waterloo	1,475	37,847	514	10	2,022	12,659	6,794
497. Waters, Sudbury	711	1,421	....	.....	.....	.....	.....
498. Watt, Muskoka	612	2,974	23	.....	.....	.....	200
499. Wawanosh E., Huron	3,622	11,177	....	26	41	442	1,200
500. Wawanosh W., Huron	698	11,016	....	.....	19	.....	1,020
501. Wellesley, Waterloo	1,493	32,816	854	5	504	1,205	9,805
502. Westmeath, Renfrew	156	12,011	162	80	10	.....	2,495
503. Westminster, Middlesex	10,706	37,063	293	48	112	.....	1,500
504. Whitby E., Ontario	246	14,536	108	107	144	35	4,000
505. Whitby, Ontario	108	14,592	108	.....	.....	.....	5,218
506. Whitchurch, York	627	16,505	....	.....	401	345	1,400
507. Widdifield, Nipissing	290	3,977	56	185	.....	.....	3,200
508. Wilberforce & Algona N., Renfrew	702	6,066	108	14	.....	.....	.....
509. Williams E, Middlesex	1,390	15,458	....	2	35	.....	6,774
510. Williams W., Middlesex	598	11,068	....	3	1	.....	4,514
511. Williamsburg, Dundas	1,833	25,804	....	1	.....	4,634	.....
512. Willoughby, Welland	1,021	7,516	138	27	.....	.....	500
513. Wilmot, Waterloo	8,388	26,092	558	68	48	.....	3,000
514. Winchester, Dundas	6,916	20,894	....	3	587	5,058	9,830
515. Windham, Norfolk	3,178	19,468	....	6	9	88	.....
516. Wolfe Island, Frontenac	1,754	10,074	64	.....	.....	.....	500
517. Wolford, Grenville	666	8,744	56	8	.....	.....	.....
518. Wollaston, Hastings	276	2,775	30	24	.....	.....	.....
519. Woodhouse, Norfolk	2,010	10,348	....	.....	48	.....	.....
520. Woolwich, Waterloo	2,745	25,900	194	11	393	561	.....
521. Worthington & Blue, Rainy River	206	1,186	....	.....	.....	.....	650
522. Yarmouth, Elgin	.....	42,822	....	35	38	.....	18,579
523. Yonge Front, Leeds	1,792	8,914	5	9	.....	.....	.....
524. Yonge & Escott Rear, Leeds	162	8,032	91	8	.....	.....	546
525. York, York	15,457	126,302	515	.....	6,467	20,017	11,780
526. Zone, Kent	699	7,319	....	2	35	.....	3,000
527. Zorra E., Oxford	3,103	31,505	108	182	40	966	10,000
528. Zorra W., Oxford	9,625	22,129	....	.....	468	.....	3,750

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Receipts, 1907.—*Continued.*							Disbursements, 1907.					
Borrowed on debentures for schools.	Borrowed on debentures for drainage.	Borrowed on debentures for other purposes.	Premiums on debentures sold.	County grants.	Miscellaneous.	Total receipts.	Allowances, salaries and commissions.	Law costs.	Other expenses of municipal government.	Roads and bridges.	Buildings and other works.	No.
$	$	$	$	$	$	$	$	$	$	$	$	
.....	.....	.....	....	.....	.....	9,207	559	.....	210	1,013	.....	477
.....	.....	.....	....	.....	333	25,755	1,074	44	382	3,956	.....	478
.....	.....	.....	....	.....	160	38,660	1,322	.....	403	10,090	.....	479
.....	.....	16,624	36	.....	*2,734	39,399	905	103	625	19,109	.....	480
.....	.....	.....	....	396	207	4,767	461	7	144	1,272	.....	481
.....	.....	.....	....	.....	14	13,530	666	92	185	1,184	.....	482
.....	.....	.....	....	.....	170	23,043	1,084	.....	348	1,662	.....	483
.....	.....	.....	....	.....	963	26,686	594	5	224	5,083	.....	484
.....	.....	.....	....	.....	215	19,150	868	.....	357	1,598	31	485
.....	.....	.....	....	.....	130	2,408	387	12	130	316	.....	486
.....	.....	.....	....	.....	461	48,998	1,816	37	739	5,385	416	487
2,100	.....	.....	147	69	15	15,786	545	35	272	1,600	.....	488
.....	.....	.....	....	.....	41	16,901	1,018	71	160	1,874	.....	489
.....	.....	.....	....	.....	16	25,304	830	18	276	4,142	.....	490
.....	.....	.....	....	332	335	32,003	782	8	252	2,339	.....	491
2,800	.....	.....	....	.....	941	36,891	948	15	352	7,313	100	492
.....	.....	.....	....	.....	12	13,811	606	2	257	1,932	.....	493
800	.....	.....	....	.....	129	20,362	703	89	268	3,695	138	494
1,500	700	.....	....	.....	357	33,877	680	60	397	5,734	.....	495
.....	.....	.....	....	.....	163	61,484	1,736	145	334	8,403	.....	496
.....	.....	.....	....	.....	6	2,138	307	.....	31	210	95	497
.....	.....	.....	....	.....	6	3,815	278	101	.. ...	692	.....	498
1,600	.....	3,000	36	.....	211	21,355	581	4	195	1,625	.....	499
.....	.....	.....	....	.....	144	12,897	645	7	218	1,975	.....	500
.....	3,747	.....	....	.....	23	50,452	1,235	755	531	7,950	.....	501
4,000	.....	.....	....	.....	99	19,013	902	.....	379	2,363	.....	502
.....	.....	.....	....	1,405	30	51,157	1,454	23	456	13,973	.....	503
.....	.....	.....	....	.....	525	19,701	852	63	281	4,345	32	504
.....	.....	.....	....	.....	85	20,111	913	730	184	4,300	.....	505
.....	.....	.....	....	.....	17	19,295	948	15	269	2,579	.....	506
3,600	.....	.....	35	.....	.....	11,343	791	17	190	1,289	....	507
.....	.....	.....	....	.....	4	6,894	367	.....	170	678	9	508
.....	.....	.....	....	1,090	112	24,861	564	90	132	7,985	.....	509
.....	.....	.....	....	586	169	16,939	476	381	159	2,307	.....	510
.....	2,528	.....	122	.....	226	35,148	706	106	329	4,166	....	511
.....	.....	.....	....	150	32	9,384	181	.....	90	2,323	.....	512
.....	.....	.....	....	.....	72	38,226	1,478	16	364	5,319	.....	513
.....	.....	.....	....	.....	†2,226	45,514	1,114	76	217	6,007	.....	514
1,200	.....	.....	....	.....	397	24,346	814	49	380	2,962	.....	515
.....	.....	.....	....	.....	173	12,565	716	.....	153	933	131	516
.....	.....	.....	....	.....	78	9,552	445	2	171	1,096	.....	517
750	.....	.....	....	263	58	4,176	313	16	113	622	.....	518
.....	.....	.....	....	.....	9	12,445	525	39	145	2,621	.....	519
4,600	.....	.....	....	.....	184	34,588	1,204	35	337	4,469	.....	520
.....	.....	.....	....	.....	30	2,072	287	5	127	68	.....	521
7,000	.....	.....	....	.....	152	68,626	1,635	4,208	803	10,490	.....	522
.....	.....	.....	....	.....	92	10,812	486	32	137	3,463	125	523
.....	.....	.....	....	.....	9	8,848	329	.....	75	1,973	110	524
77,500	.....	40,000	1161	.....	1,829	301,028	8,837	375	2,882	48,103	1,317	525
.....	688	.....	....	100	146	11,989	636	208	195	1,957	.....	526
.....	2,907	.....	23	1,041	284	50,159	1,045	9	647	12,759	.....	527
.....	988	.....	....	919	489	38,368	795	858	433	6,225	.....	528

* Including $2,476 received from Seaforth for crushed stone.

† Including $1,881 from other municipalities as share of drainage expenditures.

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Township Municipalities.	Disbursements, 1907.—*Continued.*						
	Board of Health.	Support of the poor and other charities.	County Treasurer for levies.	Payment on account of schools and education.	Drainage works.	Sinking Fund investments and deposits.	Other investments and deposits.
	$	$	$	$	$	$	$
477. Tossorontio	117	50	2,081	3,773	.....	.....	.....
478. Townsend	25	5	5,700	10,084	103	.....	.....
479. Trafalgar	24	224	4,227	9,991	.....	.....	.....
480. Tuckersmith	25	39	3,932	4,751	437	.....	.....
481. Tudor and Cashel	8	15	451	1,765	.....	.....	.....
482. Turnberry	57	465	2,656	4,415	1,690	.....	.....
483. Tyendinaga	108	459	7,547	10,086	.....	.....	.....
484. Usborne	42	15	3,938	5,045	2,987	.....	.....
485. Uxbridge	34	175	1,899	5,942	.....	2,425	.....
486. Van Horne	5	.....	.....	600	.....	.....	.....
487. Vaughan	489	12	6,073	10,149	.....	.....	15,046
488. Verulam	4	10	2,632	7,035	.....	94	.....
489. Vespra	5	30	3,083	6,455	.....	.....	.....
490. Wainfleet	20	30	3,293	6,937	441	.....	.....
491. Wallace	32	53	8,089	6,634	361	10,678	.....
492. Walpole	54	199	8,009	13,934	.....	.....	.....
493. Walsingham N	20	20	1,800	5,009	46	.....	.....
494. Walsingham S	13	67	1,740	6,556	.....	.....	.....
495. Warwick	12	291	4,373	10,818	1,572	.....	.....
496. Waterloo	285	72	6,635	21,407	.....	.....	12,659
497. Waters	.....	.....	.....	1,050	.....	.....	.....
498. Watt	40	10	.....	1,652	.....	.....	.....
499. Wawanosh E	7	5	5,503	6,845	28	.....	.....
500. Wawanosh W	63	88	2,812	5,027	401	.....	.....
501. Wellesley	257	61	4,808	14,401	5,578	.....	1,264
502. Westmeath	54	180	2,810	11,440	.....	.....	.....
503. Westminster	69	31	7,332	12,794	1,166	.....	.....
504. Whitby E	1	109	3,229	5,911	.....	.....	.....
505. Whitby	6	15	3,155	5,175	.....	.....	.....
506. Whitchurch	276	17	3,907	8,398	.....	406	.....
507. Widdifield	67	102	.....	5,730	.....	.....	163
508. Wilberforce and Algona N	.....	156	1,359	2,954	.....	.....	.....
509. Williams E	.....	80	4,537	3,723	154	.....	.....
510. Williams W	.....	104	3,374	3,955	.....	.....	.....
511. Williamsburg	12	146	3,676	9,658	7,887	.....	156
512. Willoughby	2	5	1,387	3,167	.....	.....	.....
513. Wilmot	492	10	4,806	21,234	58	.....	.....
514. Winchester	32	212	.....	14,992	8,005	.....	.....
515. Windham	34	43	3,900	11,855	1,155	.....	.....
516. Wolfe Island	.....	228	3,077	3,824	.....	.....	.....
517. Wolford	206	5	1,830	5,282	.....	.....	.....
518. Wollaston	35	50	147	2,533	.....	.....	.....
519. Woodhouse	30	10	2,740	5,479	.....	.....	.....
520. Woolwich	353	18	4,352	15,287	.....	.....	500
521. Worthington and Blue	.....	.....	.....	1,338	.....	.....	.....
522. Yarmouth	112	16	6,908	19,491	946	.....	.....
523. Yonge Front	370	49	1,241	4,512	.....	.....	.....
524. Yonge and Escott Rear	.....	.....	1,087	5,186	.....	.....	.....
525. York	532	977	9,677	119,899	.....	10,356	10,551
526. Zone	88	53	727	2,742	1,010	.....	.....
527. Zorra E	121	26	5,202	9,098	5,022	.....	966
528. Zorra W	165	78	1,734	5,757	8,952	.....	.....

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued*

Disbursements, 1907.—*Continued*.							Assets on Dec. 31, 1907.				
School debentures redeemed.	Drainage debentures redeemed.	All other debentures redeemed.	Refund of moneys borrowed for current expenses.	Interest on loans, advances and debentures.	Discount on debentures sold.	Miscellaneous.	Total disbursements.	Cash in treasury.	Taxes in arrears.	Sinking Fund investments and deposits.	No.
$	$	$	$	$	$	$	$	$	$	$	
.....	.....	.....	393	7	.....	110	8,313	894	78	.....	477
146	.....	.....	.....	9	.....	568	22,096	3,659	473	.....	478
200	.....	.....	11,400	279	.....	500	38,660	.....	1,192	.....	479
151	727	281	.....	174	.....	105	31,364	8,035	612	.....	480
.....	.....	.....	.....	.....	.....	.....	4,123	644	3,199	.....	481
.....	89	.....	1,200	46	.....	26	12,771	759	396	.....	482
.....	.....	.....	.....	.....	.....	67	21,361	1,682	141	.....	483
.....	.....	.....	2,807	57	.....	35	20,832	5,854	.....	.....	484
.....	.....	.....	4,300	1,230	.....	291	19,150	.....	2,351	16,823	485
.....	.....	.....	.....	.....	.....	100	1,550	858	1,247	.....	486
.....	.....	.....	.....	.....	.....	360	40,522	8,476	3,297	.....	487
93	.....	.....	.....	87	.....	93	12,500	3,286	.....	354	488
100	213	.....	.....	106	.....	57	13,172	3,729	2,550	.....	489
145	1,353	.....	6,358	322	.....	115	24,280	1,024	3,321	.....	490
.....	.....	.....	1,800	932	.....	19	31,979	24	3,034	11,317	491
300	.....	967	3,500	123	.....	670	36,484	407	13	.....	492
.....	.....	.....	1,000	13	.....	498	11,203	2,608	1,293	.....	493
200	.....	3,046	3,429	320	.....	98	20,362	.....	1,673	.....	494
500	1,757	.....	6,455	328	.....	98	33,105	772	1,029	.....	495
49	603	615	6,794	466	.....	297	60,500	984	130	.....	496
.....	.....	.....	.....	.....	.....	.....	1,693	445	337	.....	497
175	.....	.....	200	44	.....	100	3,292	523	1,644	.....	498
225	.....	206	1,200	359	160	*3,058	20,001	1,354	544	.....	499
150	60	.....	1,020	75	.....	25	12,566	331	319	.....	500
268	180	419	10,000	1,127	195	252	49,281	1,171	401	.....	501
294	.....	.....	.....	420	.....	130	18,972	41	6,215	.....	502
150	1,190	.....	5,900	245	.....	419	45,202	5,955	4,571	.....	503
122	....	.....	4,000	124	.....	178	19,247	454	37	.....	504
.....	.....	.....	5,345	110	....	144	20,077	34	146	.....	505
.....	.....	.....	1,400	.....	.....	196	18,411	884	790	.....	506
.....	.....	.....	2,000	52	.....	309	10,710	633	9,709	.....	507
120	.....	.....	.....	34	.....	111	5,958	936	2,708	.....	508
.....	.....	.....	6,774	126	.....	27	24,192	669	304	.....	509
.....	.....	.....	4,514	116	.....	122	15,508	1,431	225	.....	510
.....	4,588	.....	.....	1,309	.....	21	32,760	2,388	513	.....	511
.....	227	500	500	70	.....	133	8,585	799	867	.....	512
588	.....	.....	3,000	153	.....	310	37,808	418	.....	.....	513
284	5,674	.....	3,000	2,518	.....	743	42,874	2,640	.....	.....	514
.....	.....	.....	.....	.....	.....	326	21,518	2,828	1,250	.....	515
.....	.....	1,444	.....	369	.....	41	10,916	1,649	4,560	.....	516
.....	.....	.....	.....	13	.....	102	9,152	400	277	.....	517
.....	.....	.....	.....	.....	.....	35	3,864	312	2,425	.....	518
.....	.....	.....	.....	.....	.....	230	11,819	626	126	.....	519
522	.....	3,091	.....	1,872	.....	336	32,376	2,212	5	.....	520
.....	...	.....	150	3	.....	4	1,982	90	2,149	.....	521
485	217	.....	18,998	647	.....	301	65,257	3,369	6,873	.....	522
.....	.....	.....	.....	.....	.....	228	10,643	169	12	.....	523
.....	.....	.....	.....	9	.....	79	8,848	.....	58	.....	524
4,269	.....	1,972	49,918	11,785	2,710	†7,715	291,875	9,153	36,108	18,095	525
.....	2,553	144	.....	609	.....	165	11,087	902	7,335	.....	526
574	2,198	.....	10,000	896	.....	136	48,699	1,460	685	.....	527
.....	2,778	.....	.....	1,086	.....	‡4,118	35,979	2,389	639	.....	528

* Including $3,000 bonus to Guelph & Goderich Ry.
† Including $5,110 for adjustment of arrears of taxes.
‡ Including $3,750 bonus to W. O. Ry.

STATISTICS OF ONTARIO TOWNSHIP

RECEIPTS, DISBURSEMENTS,

Township Municipalities.	Assets on 31st December, 1907.—*Continued.*			
	All other investments and deposits.	Other property.	Miscellaneous.	Total assets.
	$	$	$	$
477. Tossorontio	.....	350	.....	1,322
478. Townsend	.....	5,000	.....	9,132
479. Trafalgar	45,173	3,000	2,455	51,820
480. Tuckersmith	17,700	1,600	705	28,652
481. Tudor and Cashel	.....	.....	.....	3,843
482. Turnberry	.....	157	.....	1,312
483. Tyendinaga	.....	1,000	.....	2,823
484. Usborne	.....	600	.....	6,454
485. Uxbridge	.....	1,250	87	20,511
486. Van Horne	.....	1,468	250	3,823
487. Vaughan	35,332	1,700	1,121	49,926
488. Verulam	.....	400	2,596	6,636
489. Vespra	.....	800	400	7,479
490. Wainfleet	26,000	3,240	6,186	39,771
491. Wallace	.....	400	108	14,883
492. Walpole	.....	899	3,100	4,419
493. Walsingham N.	.....	1,450	187	5,538
494. Walsingham S.	.....	1,750	600	4,023
495. Warwick	.....	700	1,391	3,892
496. Waterloo	36,065	1,000	1,792	39,971
497. Waters	.....	75	.....	857
498. Watt	.....	.....	525	2,692
499. Wawanosh E.	.....	.....	1,976	3,874
500. Wawanosh W	.....	1,000	1,100	2,750
501. Wellesley	12,335	.....	5,015	18,922
502. Westmeath	.....	1,145	8,841	16,242
503. Westminster	.....	.....	.....	10,526
504. Whitby E.	3,200	1,450	786	5,927
505. Whitby	.....	1,000	440	1,620
506. Whitchurch	14,503	472	325	16,974
507. Widdifield	163	580	3,600	14,685
508. Wilberforce and Algona N	.....	180	720	4,544
509. Williams E.	.....	.....	.....	973
510. Williams W	.....	50	91	1,797
511. Williamsburg	156	†1,400	17	4,474
512. Willoughby	.....	1,150	.....	2,816
513. Wilmot	.....	1,300	836	2,554
514. Winchester	18,830	1,625	8,258	31,353
515. Windham	.....	5,125	2,014	11,217
516. Wolfe Island	.....	2,362	*20,000	28,571
517. Wolford	.....	750	70	1,497
518. Wollaston	.....	1,000	750	4,487
519. Woodhouse	.....	.....	.....	752
520. Woolwich	8,178	220	7,817	18,432
521. Worthington and Blue	.....	.....	68	2,307
522. Yarmouth	.....	4,300	10,629	25,171
523. Yonge Front	.....	.....	.....	181
524. Yonge and Escott Rear	.....	2,775	.....	2,833
525. York	19,813	1,207	†230,656	315,032
526. Zone	.....	650	183	9,070
527. Zorra E.	200	2,900	5,711	10,956
528. Zorra W.	9,450	450	.....	12,928

* Ferry-steamer. † Including $190,285 advances to School Sections on debentures.

MUNICIPALITIES FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Liabilities on December 31, 1907.										
County levy.	Local school rates.	Railway debentures.	School debentures.	Drainage debentures.	All other debentures.	Loans for current expenses and interest.	Due Sinking Fund.	Miscellaneous.	Total liabilities.	No.
$	$	$	$	$	$	$	$	$	$	
....	.....	.....	.....	.....	.....	.....	.....	.....	.....	477
.....	.....	.....	.....	.....	.....	66	.....	.....	66	478
.....	.....	.....	800	.....	.....	3,110	.....	688	4,598	479
.....	.....	.....	705	891	17,577	.....	.....	1,160	20,333	480
.....	1,979	.....	.....	.....	.....	.....	.....	.....	1,979	481
.....	.....	.....	.....	626	.....	.....	.....	.....	626	482
.....	5	.....	.....	.....	.....	.....	.....	285	290	483
.....	.....	.....	.....	.....	.....	.....	.....	140	140	484
75	.....	19,000	.....	.....	.....	203	1,830	.....	21,108	485
.....	.....	.....	.....	.....	.....	.....	.....	107	107	486
6,784	31	.....	.....	.....	.....	.....	.....	850	7,665	487
.....	546	12,344	2,845	.....	.....	.....	.....	509	16,244	488
3,070	.....	.....	400	1,802	.....	.....	.....	.....	5,272	489
.....	600	.....	1,160	3,243	.....	3,763	.....	.....	8,766	490
.....	16	20,000	.....	.....	.....	.....	639	65	20,720	491
.....	.....	.....	3,100	.....	833	.....	.....	.....	3,933	492
.....	1,825	.....	.....	.....	.....	.....	.....	.....	1,825	493
.....	46	.....	600	.....	.....	3,758	.....	5	4,409	494
.....	178	.....	1,000	3,373	.....	.....	.....	75	4,626	495
.....	.....	.....	1,320	1,612	4,247	.....	.....	107	7,286	496
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	497
783	.....	.....	525	.....	.....	.....	.....	*506	1,814	498
.....	.....	2,794	1,960	.....	.....	.....	.....	185	4,939	499
.....	.....	.....	750	540	.....	.....	.....	73	1,363	500
.....	.....	11,178	5,015	3,567	.....	3,584	.....	.....	23,344	501
.....	.....	.....	8,547	.....	.....	2,495	.....	.....	11,042	502
3,000	193	.....	.....	2,691	.....	.....	.....	.....	5,884	503
.....	62	.....	686	.....	.....	.....	.....	177	925	504
.....	56	.....	.....	.....	.....	118	.....	100	274	505
.....	.....	.....	.....	.....	.....	4,847	.....	264	5,111	506
.....	3,474	.....	3,600	.....	.....	2,000	.....	185	9,259	507
.....	1,643	.....	720	.....	.....	.....	.....	374	2,737	508
.....	.....	.....	.....	.....	.....	.....	.....	51	51	509
.....	55	.....	.....	.....	.....	.....	.....	100	155	510
.....	.....	.....	.....	25,737	.....	.....	.....	.....	25,737	511
.....	705	.....	.....	455	.....	.....	.....	113	1,273	512
.....	.....	.....	836	.....	.....	.....	.....	.....	836	513
3,129	1,276	.....	1,602	54,124	.....	18,793	.....	1,016	79,940	514
.....	.....	.....	1,200	.....	.....	.....	.....	.....	1,200	515
3,077	.....	.....	.....	.....	17,156	500	.....	.....	20,733	516
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	517
173	1,260	.....	750	.....	.....	.....	.....	10	2,193	518
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	519
.....	.....	4,049	7,817	.....	28,658	.....	.....	.....	40,524	520
.....	.....	.....	.....	.....	.....	500	.....	30	530	521
10,159	.....	.....	8,526	1,308	.....	.....	.....	2,379	22,372	522
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	523
.....	.....	.....	.....	.....	.....	546	.....	30	576	524
11,297	25,585	.....	139,787	.....	67,560	11,780	3,537	3,648	263,194	525
965	1,901	.....	.....	3,703	369	5,000	.....	.....	11,938	526
.....	.....	.....	2,461	14,201	.....	.....	.....	5,177	21,839	527
.....	.....	.....	.....	20,095	.....	6,220	.....	.....	26,315	528

* Including $421 payable to Stephenson township as share of School debentures.

STATISTICS OF ONTARIO VILLAGE AND TOWN

RECEIPTS, DISBURSEMENTS,

Village and Town Municipalities and Counties in which located.	Receipts, 1907.							
	Balance from 1906.	Municipal and school taxes.	Licenses.	Fees, rents, fines, etc.	Water, electric light and gas rates.	Interest and dividends.	Refund of money invested.	Borrowed for current expenses.
	$	$	$	$	$	$	$	$
1. Acton, Halton	27	8,234	281	183	3,158	436	.....	3,500
2. Ailsa Craig, Middlesex	147	3,391	179	159	.....	.....	3	.....
3. Alexandria, Glengarry	692	12,469	662	162	4,017	.....	.....	12,500
4. Alliston, Simcoe	.....	12,277	.....	126	1,600	566	1,393	25,275
5. Almonte, Lanark	4,715	22,774	712	560	6,404	172	.....	8,206
6. Alvinston, Lambton	921	5,658	313	27	.....	12	.....	5,103
7. Amherstburg, Essex	1,120	17,776	1,118	313	3,843	1	.....	5,649
8. Arkona, Lambton	886	1,911	.....	55	.....	17	.....	213
9. Arnprior, Renfrew	2,619	33,861	1,796	1,020	5,294	1,287	2,036	50,203
10. Arthur, Wellington	448	9,094	336	153	.....	58	.....	10,752
11. Athens, Leeds	2,124	5,215	237	283	.....	.....	.....	.....
12. Aurora, York	668	12,090	341	30	1,735	.....	.....	12,000
13. Aylmer, Elgin	.....	29,204	585	374	8,281	1,238	7,566	45,529
14. Ayr, Waterloo	95	4,832	234	4	.....	272	.....	3,955
15. Bancroft, Hastings	244	3,590	254	72	.....	.....	.....	412
16. Barrie, Simcoe	3,677	59,881	3,275	1,326	49,865	1,567	10,870	9,918
17. Bath, Lennox and Addington	729	2,357	145	74	.....	66	.....	.....
18. Bayfield, Huron	122	1,678	200	69	.....	....	75	1
19. Beamsville, Lincoln	604	5,775	.....	252	385	30	259	11,534
20. Beaverton, Ontario	677	4,762	205	22	.....	664	200	3,200
21. Beeton, Simcoe	931	4,810	225	83	2,680	.....	.....	2,600
22. Belle River, Essex	276	1,575	413	46	.....	.....	200	500
23. Berlin, Waterloo	.....	136,222	3,816	2,743	*112,877	7,395	1,148	95,000
24. Blenheim, Kent	95	16,267	427	910	3,901	157	.....	23,659
25. Blind River, Algoma	2,015	9,375	1,265	1,365	.....	.....	.....	3,400
26. Bloomfield, Prince Edward	.....	3,690	.....	42	.....	.....	.....	1,325
27. Blyth, Huron	1,248	6,713	251	437	.....	88	400	3,544
28. Bobcaygeon, Victoria	5,251	6,605	218	109	.....	85	3,189	.....
29. Bolton, Peel	57	4,196	.....	57	.....	.....	.....	4,800
30. Bonfield, Nipissing	124	1,490	271	.....	.....	.....	.....	.....
31. Bothwell, Kent	2,300	4,455	303	413	2,270	30	.....	3,50[illegible]
32. Bowmanville, Durham	133	29,412	311	725	348	152	1,697	18,85[illegible]
33. Bracebridge, Muskoka	.....	22,316	1,001	323	16,318	59	.....	46,83[illegible]
34. Bradford, Simcoe	320	5,912	150	203	.....	.....	.....	51[illegible]
35. Brampton, Peel	.....	28,353	872	139	4,380	168	1,303	26,33[illegible]
36. Bridgeburg, Welland	1,508	17,822	408	4	2,860	.....	89	6,00[illegible]
37. Brighton, Northumberland	528	10,172	308	117	.....	.....	.....	3,55[illegible]
38. Brockville, Leeds	366	100,424	4,653	4,076	75,580	7,351	14,689	214,10[illegible]
39. Bruce Mines, Algoma	1,269	2,730	191	.....	.....	.....	.....	65[illegible]
40. Brussels, Huron	747	9,063	303	415	.....	981	4,089	1,07[illegible]
41. Burks Falls, Parry Sound	196	6,891	451	43	1,269	745	830	3,50[illegible]
42. Burlington, Halton	2,215	8,411	188	112	151	174	40	12,66[illegible]

* Including $80,836 for electric light and power rates, and street railway revenue.

Note.—The names of towns are printed in small capitals.

MUNICIPALITIES, FOR THE YEAR 1907.

ASSETS AND LIABILITIES, 1907.

Receipts, 1907.—*Continued.*						Disbursements, 1907.						
Borrowed on debentures for schools.	Borrowed on debentures for other purposes.	Premiums on debentures sold.	County grants.	Miscellaneous.	Total receipts.	Allowances, salaries and commissions.	Lighting of streets, water supply and fire protection.	Law costs.	Other expenses of municipal government.	Streets, bridges and parks	No.
$	$	$	$	$	$	$	$	$	$	$	
.....	2,153	.....	....	380	18,352	730	3,349	.....	353	3,163	1
.....	1,200	.....	93	200	5,372	158	76	96	285	349	2
.....	2,232	.....	....	1,180	33,914	854	7,848	72	383	2,894	3
.....	9,951	.....	306	440	51,934	851	1,099	.....	552	4,325	4
.....	.....	.....	....	110	43,653	584	4,703	67	1,442	4,488	5
.....	.....	.....	....	175	12,209	437	1,094	142	295	580	6
.....	.....	.....	....	710	30,530	1,021	4,288	.....	1,465	4,974	7
.....	128	.....	...	103	3,313	161	.....	.....	116	728	8
.....	*67,325	.....	....	809	166,250	1,606	7,750	1,681	1,230	1,475	9
551	.....	.....	....	341	21,733	429	799	.....	380	3,025	10
.....	.....	.....	....	109	7,968	233	5	87	203	1,651	11
.....	.....	.....	....	157	27,021	497	2,267	157	278	2,132	12
.....	11,032	.....	...	511	104,320	954	9,415	.....	945	4,146	13
.....	2,000	....	....	57	11,449	156	460	.....	132	2,176	14
.....	.....	.....	300	.....	4,872	294	344	.....	58	423	15
.....	.....	.....	....	270	140,649	1,920	14,990	443	‖14,251	4,540	16
.....	.....	.....	55	39	3,465	229	64	10	85	566	17
.....	.....	.....	....	52	2,197	144	.....	.....	88	566	18
.....	.....	.....	....	315	19,154	367	1,073	228	211	4,886	19
.....	.....	.....	....	207	9,937	304	755	35	113	2,247	20
.....	.....	.....	....	87	11,416	298	2,573	.....	210	421	21
.....	.....	.....	....	1	3,011	171	.....	.....	97	834	22
.....	*2181,546	440	100	‡15,953	557,240	6,838	55,854	4,709	¶63,213	44,707	23
.....	.....	.....	....	393	45,812	616	4,250	90	965	613	24
1,000	.....	.....	....	†4,317	22,737	709	1,211	175	612	2,640	25
.....	.....	.....	100	51	5,208	122	47	22	153	984	26
.....	3,858	.....	50	14	16,603	639	744	35	383	1,188	27
.....	.....	.....	....	150	15,607	187	692	.....	132	559	28
.....	2,500	339	....	107	12,056	189	173	.....	195	3,842	29
.....	.....	.....	....	.....	1,885	79	.....	13	20	20	30
.....	.....	.....	....	189	13,460	840	2,139	.....	396	556	31
.....	.....	.....	....	748	52,376	1,151	3,898	.....	928	3 040	32
.....	.....	.....	....	413	87,268	3,013	4,050	1,590	3,376	18,238	33
.....	.....	.....	....	368	7,472	742	554	50	184	2,340	34
.....	.....	.....	....	358	61,908	1,349	2,629	1,267	1,187	19,488	35
.....	.....	.....	....	233	28,924	444	2,411	995	464	4,601	36
.....	.....	.....	....	60	14,741	803	755	13	566	2,486	37
.....	18,374	.....	....	869	440,482	3,900	52,435	1,290	5,183	13,252	38
.....	.....	.....	...	545	5,385	272	420	1	114	881	39
....	1,442	.....	....	21	18,131	690	569	.....	343	405	40
.....	.....	.....	....	131	14,056	624	660	30	204	1,108	41
.....	4,511	.....	....	85	28,556	909	1,176	58	292	19,444	42

* Local improvement.

*2 Including local improvement debentures $71,346; waterworks, $4,000; street railway, $83,200. † Including $4,000 school debentures reported in 1906 but not sold until 1907, the Traders' Bank having advanced the amount pending sale of debentures, per contra payment to bank see page 65. ‡ Including $9,290 contractors' deposits. ‖ Including $11,728 for maintenance of electric-light and power supplied private users. ¶ Including $60,331 maintenance street-railway, and gas and electric light to private users.

STATISTICS OF ONTARIO VILLAGE AND TOWN

RECEIPTS, DISBURSEMENTS

Villages and Towns.	Disbursements, 1907.—*Continued.*							
	Waterworks and electric light construction.	Buildings and other works.	Board of Health.	Support of the poor and other charities.	Administration of justice, including police services.	County treasurer for levies.	Payment on account of schools and education.	Sinking Fund investments and deposits.
	$	$	$	$	$	$	$	$
1. Acton	.....	.....	15	71	27	496	2,700	948
2. Ailsa Craig	.....	7	122	22	23	376	1,028	.....
3. Alexandria	.....	.....	38	135	847	289	2,182	.....
4. Alliston	1,462	39	3	39	13	902	3,086	2,477
5. Almonte	.....	.....	59	224	746	2,005	7,420	789
6. Alvinston	.....	.....	.....	75	18	421	1,947	.....
7. Amherstburg	576	.....	.....	278	528	.....	1,563	.....
8. Arkona	.....	121	8	27	38	365	811	.....
9. Arnprior	3,373	.....	98	67	1,250	2,128	10,898	5,010
10. Arthur	.....	.....	63	31	474	510	3,786	.....
11. Athens	.....	442	91	.....	.....	281	2,672	.....
12. Aurora	582	.....	338	49	.....	919	3,450	.....
13. Aylmer	2,988	.....	863	78	494	1,500	5,233	.....
14. Ayr	.....	.....	.....	.....	35	368	1,925	781
15. Bancroft	.....	1,127	3	30	.....	718	1,308	.....
16. Barrie	27,327	.....	374	917	2,410	3,825	20,071	.....
17. Bath	.....	.....	6	146	13	400	1,166	.....
18. Bayfield	.....	.....	6	5	51	212	915	.....
19. Beamsville	5,445	.....	11	28	15	.....	2,904	.....
20. Beaverton	.....	.....	7	102	65	460	1,489	13
21. Beeton	.....	.....	.....	6	6	392	521	.....
22. Belle River	.....	.....	251	78	8	236	303	.....
23. Berlin	49,614	*71,412	3,792	1,093	3,109	5,909	39,163	.....
24. Blenheim	1,142	.....	31	48	629	531	3,537	.....
25. Blind River	.....	449	136	21	641	.....	6,798	530
26. Bloomfield	.....	.....	22	2	8	488	1,280	.....
27. Blyth	250	269	.....	47	18	406	1,517	228
28. Bobcaygeon	.....	.....	60	5	484	438	2,015	.....
29. Bolton	.....	.....	.....	7	86	216	2,130	.....
30. Bonfield	.....	.....	18	15	.....	.....	1,156	.....
31. Bothwell	.....	.....	9	349	481	211	1,613	.....
32. Bowmanville	.....	.....	36	699	1,352	1,809	7,450	.....
33. Bracebridge	10,202	272	58	160	1,090	.....	10,421	58
34. Bradford	.....	.....	.....	28	40	601	2,400	.....
35. Brampton	9,443	239	108	39	562	1,633	7,800	.....
36. Bridgeburg	1,255	.....	6	219	235	933	3,300	.....
37. Brighton	.....	.....	20	43	9	907	2,850	.....
38. Brockville	9,685	583	1,275	2,556	6,698	.....	26,977	14,953
39 Bruce Mines	.....	.....	.....	64	2	.....	1,991	.....
40. Brussels	.....	.....	.....	5	120	578	2,337	5,794
41. Burke Falls	194	.....	.....	10	8	.....	2,289	97
42. Burlington	.....	905	36	251	17	590	2,550	.....

* Including $52,174 for street-railway purchase and construction, and $19,288 on market building.

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Disbursements, 1907.—*Continued.*								Assets Dec. 31, '07		
Other investments and deposits.	School debentures redeemed.	All other debentures redeemed.	Refund of moneys borrowed for current expenses.	Interest on loans, advances and debentures.	Discount on debentures sold.	Miscellaneous.	Total disbursements.	Cash in treasury.	Taxes in arrears.	No.
$	$	$	$	$	$	$	$	$	$	
.....	.....	575	3,500	1,548	.....	358	17,833	519	888	1
.....	.....	438	.....	416	.....	*1,542	4,938	434	212	2
.....	77	1,861	12,500	3,573	.....	128	33,681	233	3,105	3
.....	93	545	32,313	2,649	.....	415	50,863	1,071	.....	4
47	.....	2,062	8,206	3,914	.....	802	37,558	6,095	250	5
.....	147	903	5,000	972	.....	178	12,209	.....	241	6
.....	.....	5,066	2,700	6,089	.....	643	29,191	1,339	4,018	7
.....	.....	210	213	131	.....	77	3,006	307	.....	8
2,036	150	3,511	101,123	13,196	1,866	1,011	159,759	6,491	21,147	9
.....	.....	6,483	3,750	1,492	51	280	21,553	180	495	10
.....	105	425	400	520	.....	295	7,110	558	298	11
400	.....	1,439	11,500	1,679	.....	478	26,165	856	1,309	12
14,853	360	8,063	47,265	5,124	60	966	103,307	1,013	1,155	13
.....	.....	300	3,955	857	.....	225	11,370	79	96	14
.....	.....	.....	300	8	.....	259	4,872	.....	1,810	15
42	968	16,065	11,086	13,883	.....	2,285	135,397	5,252	6,225	16
.....	.....	.....	275	.....	.....	69	3,029	436	.....	17
.....	.....	132	.....	63	.....	15	2,197	.....	38	18
.....	.....	598	830	750	.....	154	17,500	1,654	295	19
.....	....	200	3,459	550	.....	107	9,906	31	133	20
.....	.....	1,025	2,300	1,047	.....	126	8,925	2,491	148	21
.....	.....	138	500	76	.....	73	2,765	246	534	22
56	1,390	30,343	109,066	41,676	3,345	4,669	539,958	17,282	6,534	23
.....	183	3,052	23,751	1,871	.....	1,179	42,488	3,324	4,383	24
.....	.....	.....	2,600	769	.....	†4,269	21,560	1,177	2,414	25
.....	.....	.....	225	56	.....	1,643	5,052	156	15	26
3,000	149	1,776	3,544	1,320	.....	191	15,704	899	405	27
2,788	.....	410	.....	1,125	.....	83	8,978	6,629	.....	28
.....	.....	250	4,400	384	.....	133	12,005	51	12	29
.....	.....	.....	.....	.....	.....	10	1,331	554	1,006	30
.....	.....	918	3,000	736	.....	119	11,367	2,093	1,164	31
.....	.....	5,067	19,200	5,522	.....	2,092	52,304	72	2,631	32
1	178	5,895	21,328	6,316	.....	1,022	87,268	.....	4,976	33
.....	171	.....	.....	74	.....	222	7,406	66	3,500	34
.....	.....	5,819	.....	8,435	.....	1,910	61,908	.....	1,814	35
118	.....	1,133	6,000	1,668	.....	346	24,128	4,796	1,079	36
.....	.....	507	3,556	189	.....	422	13,126	1,615	367	37
3,572	13,000	18,293	228,613	34,843	794	2,154	440,056	426	17,005	38
.....	.....	.....	650	11	.....	571	4,977	408	1,735	39
.....	.....	1,571	1,070	2,440	.....	284	16,206	1,925	405	40
.....	348	1,512	3,500	2,988	.....	154	13,726	330	162	41
.....	163	985	.....	812	.....	368	28,556	.....	353	42

* Including $1,452 for site—bonus to flax mill.

† Including $4,000 refund to Traders' Bank as per note on page 63.

STATISTICS OF ONTARIO VILLAGE AND TOWN

RECEIPTS, DISBURSEMENTS,

Villages and Towns.	Assets on December 31st, 1907.—*Continued.*						Liabilities Dec 31	
	Sinking Fund investments and deposits.	All other investments and deposits.	Waterworks and electric light plant.	Other property.	Miscellaneous.	Total assets.	County levy.	Local school rates.
	$	$	$	$	$	$	$	$
1. Acton	7,667		8,200	19,600	4,016	40,890		
2. Ailsa Craig		20		9,525		10,191		
3. Alexandria			53,000	3,000	3,818	63,156	390	1,598
4. Alliston	17,328		19,341	9,574	190	47,504		
5. Almonte	4,896	47	38,000	59,300	107	108,695		
6. Alvinston				3,466	111	3,818		11
7. Amherstburg			43,500	15,100	26,721	90,678		3,848
8. Arkona				1,685	400	2,392		
9. Arnprior	15,472	65,000	115,000	33,750	2,532	259,392	889	5,912
10. Arthur				15,316	201	16,192		700
11. Athens				14,595	380	15,831		
12. Aurora		600	26,800	9,000		38,565		2,300
13. Aylmer		26,325	100,858	16,865	1,490	147,706		
14. Ayr	8,865			5,187	5,500	19,727		
15. Bancroft				3,700	163	5,673	420	1,109
16. Barrie		43,757	193,924	57,000	13,204	319,362	3,825	8,856
17. Bath		2,000		1,700		4,136		550
18. Bayfield		1,275		650		1,963		
19. Beamsville		1,971	23,850	2,915	200	30,885	974	91
20. Beaverton	1,572	10,600		2,700	7,791	22,827		
21. Beeton			41,585	6,350	1,592	52,166	390	1,400
22. Belle River		‡800		800	50	2,430	7	
23. Berlin		56	*488,962	†329,552	52,916	895,302		
24. Blenheim			12,000	21,000	5,043	45,750	648	
25. Blind River	1,916			8,000		13,507		1,400
26. Bloomfield				1,521	10	1,702		
27. Blyth	2,781	9,600	1,250	4,055	9,863	28,853		1,504
28. Bobcaygeon		2,788	22,000	5,775	32	37,224		1,850
29. Bolton				1,315	350	1,728		
30. Bonfield						1,560		460
31. Bothwell			6,200	12,020	312	21,789		
32. Bowmanville		25,125		33,664	31,096	92,588		
33. Brackbridge	1,966	16,532	107,598	26,118	47,244	204,434		2,529
34. Bradford				8,650		12,216	601	2,600
35. Brampton		21,588	120,000	12,975	37,107	193,484		
36. Bridgeburg		118	47,243	5,900	1,672	60,808		3,300
37. Brighton			140	7,175	2,322	11,619		1,000
38. Brockville	171,183	54,152	371,772	106,295	157,323	878,156		
39. Bruce Mines				885	355	3,383		1,480
40. Brussels	21,503	4,382		6,750	49	35,014		
41. Burks Falls	1,189	14,888	33,578	1,489	986	52,621		2,471
42. Burlington		2,000	1,100	8,351	23,081	34,885		

* Including $298,148 for electric light and power plant.

† Including $108,000 for sewage system and $95,752 for interest in Berlin and Waterloo street railway.

‡ $260 written off Flax-mill loan.

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Liabilities on December 31st, 1907.—*Continued*									
Railway debentures.	School debentures.	Waterworks debentures.	Electric light debentures	All other debentures.	Loans for current expenses and interest.	Due Sinking Fund.	Miscellaneous.	Total liabilities.	No.
$	$	$	$	$	$	$	$	$	
.....	5,500	.....	10,500	17,417	.....	.....	230	33,647	1
.....	.....	.....	.....	9,706	.....	.....	.....	9,706	2
.....	2,282	26,524	11,431	18,639	7,039	.....	148	68,051	3
.....	4,818	15,800	.....	41,240	.....	.....	.....	61,858	4
.....	.....	.....	34,287	54,183	.....	.....	1,650	90,120	5
.....	1,554	.....	.....	7,774	1,103	.....	139	10,581	6
9,191	.....	22,048	853	56,924	25,541	.....	1,461	119,866	7
.....	.....	.....	.....	3,087	.....	.....	.....	3,087	8
30,000	3,259	51,148	.....	142,206	48,166	.....	1,000	282,580	9
.....	5,551	.....	.....	8,183	13,602	.....	179	28,215	10
.....	2,794	.....	.....	9,172	.....	.....	75	12,041	11
.....	5,402	17,313	.....	11,829	3,000	.....	270	40,114	12
.....	.....	47,370	15,545	41,445	8,000	.....	2,035	114,395	13
.....	10,200	.....	.....	6,905	.....	.....	.....	17,105	14
.....	.....	.....	.....	.....	112	.....	3,477	5,118	15
.....	30,929	94,113	54,263	121,945	9,918	.....	157	324,006	16
.....	.....	.....	.....	.....	550	.....	.....	1,100	17
.....	.....	.....	.....	1,124	1	.....	.....	1,125	18
.....	.....	11,580	.....	13,561	11,837	.....	2,151	40,194	19
.....	.....	.....	.....	11,600	.....	.....	141	11,741	20
.....	.....	10,628	2,333	7,066	400	.....	5	22,222	21
.....	.....	.....	.....	981	.....	.....	5	993	22
.....	57,445	101,183	280,823	494,257	45,000	.....	*29,406	1,008,114	23
1,737	3,615	.....	3,215	17,354	8,308	.....	1,586	36,463	24
.....	10,000	.....	.....	.....	1,910	.....	303	13,613	25
.....	.....	.....	.....	.....	1,100	.....	.....	1,100	26
2,773	4,066	.....	.....	21,249	.....	.....	.....	29,592	27
8,926	.....	.....	24,590	.....	.....	.....	952	36,318	28
.....	.....	.....	.....	6,773	1,000	.....	.....	7,773	29
.....	.....	.....	.....	.....	.....	.....	83	543	30
.....	.....	.....	3,265	8,974	3,000	.....	.....	15,239	31
.....	.....	.....	.....	111,154	2,610	.....	.....	113,764	32
.....	3,537	27,578	46,690	22,376	46,409	.....	4,615	153,734	33
.....	1,222	.....	.....	.....	519	.....	.....	4,942	34
.....	.....	.....	.....	163,417	26,335	.....	700	190,452	35
.....	.....	35,442	.....	2,283	.....	.....	135	41,160	36
.....	.....	.....	.....	2,267	.....	.....	.....	3,267	37
.....	27,000	128,347	220,633	416,556	30,700	.....	1,143	824,379	38
.....	.....	.....	.....	.....	.....	.....	2,315	3,795	39
.....	7,500	.....	.....	45,801	.....	.....	.....	53,301	40
.....	4,002	34,849	.....	*16,887	.....	.....	90	58,299	41
.....	1,837	.....	.....	12,721	12,666	.....	537	27,761	42

* Including $25,668 on current account of street railway.

STATISTICS OF ONTARIO VILLAGE AND TOWN

RECEIPTS, DISBURSEMENTS,

Village and Town Municipalities and Counties in which located.	Receipts, 1907.							
	Balance from 1906.	Municipal and school taxes.	Licenses.	Fees, rents, fines, etc.	Water, electric light and gas rates.	Interest and dividends.	Refund of money invested.	Borrowed for current expenses.
	$	$	$	$	$	$	$	$
43. Cache Bay, Nipissing	150	3,416	175	.....	.....	3	.....	874
44. Caledonia, Haldimand	1,282	5,018	443	8	.....	20	.....	1,641
45. Campbellford, Northumberl'd	.....	16,186	865	652	5,383	37	1,708	8,848
46. Cannington, Ontario	.....	6,970	245	54	.....	.....	.....	932
47. Cardinal, Grenville	.....	5,126	213	99	.....	.....	.....	9,776
48. Carleton Place, Lanark	1,430	26,754	1,143	745	.....	57	.....	11,308
49. Casselman, Russell	105	2,358	215	.....	.....	20	.....	350
50. Cayuga, Haldimand	392	5,635	440	230	.....	.....	.....	3,600
51. Chatsworth, Grey	647	2,102	50	55	.....	22	.....	.....
52. Chesley, Bruce	2,549	13,695	446	492	.....	380	1,337	4,102
53. Chesterville, Dundas	586	4,701	310	92	.....	.....	.....	2,000
54. Chippewa, Welland	1,126	2,986	364	379	.....	13	.....	.....
55. Clifford, Wellington	1,017	2,945	200	80	681	.....	.....	.....
56. Clinton, Huron	11,337	18,174	884	1,269	.....	1,298	533	8,000
57. Cobalt, Nipissing	.....	15,873	1,881	.....	.....	.....	.....	14,800
58. Cobden, Renfrew	.....	3,706	265	13	.....	.....	.....	300
59. Cobourg, Northumberland	2,907	43,511	2,581	4,433	.....	200	.....	23,158
60. Colborne, Northumberland	167	6,943	378	.....	.....	.....	.....	2,500
61. Collingwood, Simcoe	3,603	63,767	2,629	3,293	20,712	265	400	58,372
62. Copper Cliff, Sudbury	6,590	10,742	72	518	.....	.....	.....	.....
63. Cornwall, Stormont	.....	51,133	3,318	1,500	12,447	.....	.....	22,150
64. Courtright, Lambton	.....	900	.....	.....	.....	.....	.....	.....
65. Creemore, Simcoe	956	4,359	239	31	479	.....	.....	800
66. Delhi, Norfolk	1,913	4,299	230	26	.....	33	.....	.....
67. Deseronto, Hastings	2,968	25,020	724	304	1,603	33	.....	17,000
68. Drayton, Wellington	181	5,171	300	146	.....	.....	44	4,783
69. Dresden, Kent	5,492	11,556	436	257	3,168	165	.....	5,500
70. Dundalk, Grey	284	7,365	308	188	2,355	.....	.....	300
71. Dundas, Wentworth	1,462	29,166	1,029	1,664	2,165	775	1,000	9,000
72. Dunville, Haldimand	.....	19,560	1,113	355	2,152	86	600	.....
73. Durham, Grey	5,122	13,186	348	444	.....	20	1,000	.....
74. Dutton, Elgin	.....	6,792	309	77	.....	.....	.....	750
75. East Toronto, York	.....	48,084	738	153	6,163	1,402	2,613	12,919
76. Eganville, Renfrew	498	5,271	596	70	.....	123	5,492	.....
77. Elmira, Waterloo	1,194	7,691	535	107	.....	.....	500	23,922
78. Elora, Wellington	2,151	8,351	314	508	.....	38	500	300
79. Embro, Oxford	1,722	4,762	225	96	.....	.....	.....	1,250
80. Erin, Wellington	241	1,738	209	79	.....	.....	.....	450
81. Essex, Essex	.....	13,429	507	110	2,303	.....	.....	17,601
82. Exeter, Huron	4,073	11,844	508	116	330	73	260	4,050
83. Fenelon Falls, Victoria	3,256	8,648	348	*2,220	6,640	92	68	.....
84. Fergus, Wellington	2,031	11,034	457	378	.....	132	.....	1,209
85. Finch, Stormont	11	1,267	112	.....	.....	.....	.....	4,058

* Including $1,875 from Water and Light Commissioners, for rent of grist mill.

MUNICIPALITIES, FOR THE YEAR, 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Receipts, 1907.						Disbursements, 1907.					
Borrowed on debentures for schools.	Borrowed on debentures for other purposes.	Premiums on debentures sold.	County grants.	Miscellaneous.	Total receipts.	Allowances, salaries and commissions.	Lighting of streets, water supply and fire protection.	Law costs.	Other expenses of municipal government.	Streets, bridges and parks.	No.
$	$	$	$	$	$	$	$	$	$	$	
.....	.....	.....	....	.....	4,618	259	.....	15	120	433	43
.....	.....	.....	....	254	8,666	206	290	57	251	2,813	44
.....	.....	.....	....	204	33,883	640	4,149	.....	633	2,163	45
.....	3,000	113	....	58	11,372	195	764	329	341	1,267	46
.....	.....	.....	....	125	15,339	300	675	12	189	1,087	47
.....	*16,600	130	....	305	58,472	1,822	3,206	50	757	7,147	48
.....	.....	.....	....	.....	3,048	153	.....	.....	09	588	49
.....	3,992	.....	....	59	14,348	258	311	29	219	3,808	50
.....	.....	.....	....	.....	2,876	91	.....	.....	99	121	51
.....	1,110	.....	...	1,178	25,289	370	1,256	72	918	2,384	52
.....	.....	.....	....	39	7,728	144	192	155	168	694	53
.....	.....	.....	....	37	4,905	192	6	.....	123	638	54
.....	.....	.....	....	84	5,007	179	483	.....	95	430	55
.....	3,954	.....	....	1,124	46,573	1,076	2,969	51	1,574	5,989	56
.....	.....	.....	....	934	33,488	3,021	4,143	.....	651	4,222	57
500	.....	.... ..	....	313	5,097	217	43	.....	126	440	58
.....	3,032	.....	....	694	80,516	2,977	5,476	248	2,418	11,416	59
.....	.....	.....	....	103	10,091	228	613	50	290	1,970	60
.....	.....	.....	....	220	153,261	3,347	17,233	500	¶9,644	16,246	61
.....	.....	.....	....	.....	17,922	1,497	1,087	86	201	984	62
4,000	5,300	.....	....	312	100,160	2,015	7,406	69	2,340	9,966	63
.....	.....	.....	....	20	920	25	.....	6	92	356	64
.....	.....	.....	....	292	7,156	270	308	17	230	847	65
.....	.....	.....	....	111	6,612	179	245	.....	203	2,123	66
.....	*²40,028	.....	....	720	88,400	1,100	6,936	75	609	3,990	67
.....	.....	.....	....	191	10,816	223	676	.....	272	536	68
.....	7,166	.....	200	284	34,224	619	4,530	148	695	7,533	69
.....	.....	.....	....	633	11,433	477	359	14	§2,606	533	70
.....	.....	.....	....	1,568	47,829	1,951	5,380	1,060	861	2,899	71
.....	6,000	.....	....	4,866	34,732	1,411	5,102	95	703	1,974	72
.....	1,120	.....	....	139	21,379	631	1,112	15	373	712	73
.....	5,002	.....	...	65	12,995	229	458	.....	243	1,950	74
11,400	6,627	.....	....	1,844	91,943	1,570	12,091	905	1,871	7,213	75
.....	.....	.....	....	1,232	13,282	586	450	20	177	440	76
.....	.....	.....	....	282	34,231	353	489	17	210	1,484	77
.....	.....	.....	....	520	12,682	562	629	57	505	820	78
.....	1,504	.....	....	81	9,640	183	130	.....	236	218	79
.....	.....	.....	....	15	2,732	99	37	.....	160	688	80
.....	.....	.....	....	61	34,011	469	2,804	370	663	474	81
.....	†10,000	.....	....	728	31,982	755	2,441	67	413	2,542	82
.....	.....	.....	200	484	21,956	209	3,398	34	215	895	83
.....	.....	.....	....	‖3,369	18,610	606	2,284	43	584	2,396	84
.....	....	.....	....	.....	5,448	76	5	.....	95	4,054	85

* Comprising local improvements, $7,600 and loan to Bates & Innes, $9,000.
*² Comprising $20,028 for waterworks and $20,000 for gas plant.
† Bonus to Canning Co.
‖ Including $3,030 rebates on freight on account spur-line G.T.R. agreement.
¶ Including $5,286, maintenance electric light and power, to private users.
Including $2,222 maintenance electric light and power supplied private users.

STATISTICS OF ONTARIO VILLAGE AND TOWN

RECEIPTS, DISBURSEMENTS,

Villages and Towns.	Disbursements, 1907.—*Continued.*							
	Waterworks and electric light construction.	Buildings and other works.	Board of Health.	Support of the poor and other charities.	Administration of justice, including police services.	County Treasurer for levies.	Payment on account of schools and education.	Sinking Fund investments and deposits.
	$	$	$	$	$	$	$	$
43. Cache Bay		2,057	32				1,216	
44. Caledonia		76	31	8	12	454	2,800	
45. Campbellford	377		119	98	814	1,404	6,886	
46. Cannington			28	8	38	673	1,750	
47. Cardinal				41	21	369	1,999	
48. Carleton Place		756	280	283	337	2,611	10,345	
49. Casselman			17		10	318	1,162	88
50. Cayuga				54	74	600	2,060	
51. Chatsworth			9	5	5	181	936	156
52. Chesley		500	500	14	565	793	5,800	2,464
53. Chesterville				5	15	244	2,033	
54. Chippewa	584		6	7		208	1,252	
55. Clifford	210		15	2	26	289	1,436	
56. Clinton		1,847	738	39	228	2,259	6,200	3,106
57. Cobalt			1,111				5,800	
58. Cobden			30	5	20	617	1,975	
59. Cobourg		410	202	355	1,758	2,775	18,813	1,160
60. Colborne			31	51	48	620	2,697	
61. Collingwood	23,808	1,021	1,865	1,380	912	4,118	22,103	641
62. Copper Cliff			669	102			8,010	
63. Cornwall	1,412		291	438	2,856	3,175	16,100	
64. Courtright						205		
65. Creemore	234		358	5		371	1,414	
66. Delhi				15		378	1,355	
67. Deseronto	30,390		1,027	367	817	2,335	8,467	
68. Drayton			20	24	57	378	2,162	
69. Dresden			96	281	452	479	3,605	
70. Dundalk			15	24	6	290	842	
71. Dundas	564		768	636	1,215	3,000	6,920	2,043
72. Dunnville	6,000	335	72	436	605	1,120	5,531	457
73. Durham			171	42	61	653	4,901	
74. Dutton			58		117	500	2,016	
75. East Toronto	5,992	52	582	95	1,307	2,011	17,685	2,692
76. Eganville		6,436	5		66	732	844	
77. Elmira	16,422	400	114	10	59	566	1,614	
78. Elora				11	500	577	3,392	
79. Embro					31	274	1,338	
80. Erin			8		46	244	675	
81. Essex			51	79	264	265	3,600	
82. Exeter		286	10	53	77	807	2,969	
83. Fenelon Falls	1,210	1,395	175	36	502	630	2,790	
84. Fergus			12	1	509	837	4,616	
85. Finch			9	39	5	84	639	

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES. 1907.—*Continued.*

Disbursements, 1907.—*Continued.*								Assets Dec. 31, '07.		
Other investments and deposits.	School debentures redeemed.	All other debentures redeemed.	Refund of moneys borrowed for current expenses	Interest on loans, advances and debentures.	Discount on debentures sold.	Miscellaneous.	Total disbursements.	Cash in treasury.	Taxes in arrears.	No.
$	$	$	$	$	$	$	$	$	$	
.... ..	175	... .	.....	134	.....	147	4,618	.....	132	43
.....	.....	.....	979	153	.....	536	8,666	.....	221	44
805	1,283	2,374	9,145	2,103	.....	225	33,218	665	1,123	45
.....	.....	239	5,327	312	.....	101	11,372	.....	1,026	46
.....	240	.....	9,793	305	.....	257	15,291	48	857	47
9,000	.....	6,100	11,500	3,854	.....	424	58,472	.....	143	48
.....	.....	.....	200	130	.....	70	2,835	213	740	49
....	.....	666	4,850	802	.....	367	14,098	250	1,134	50
.....	.....	.....	.....	161	.....	52	1,816	1,060	.....	51
.....	381	362	4,202	1,864	.....	1,245	23,690	1,599	918	52
750	273	241	2,000	706	.....	86	7,706	22	401	53
.....	.....	164		164	.....	30	3,374	1,531	151	54
.....	.....	308		388	.....	126	3,987	1,020	854	55
.....	50	1,722	8,000	4,147	.. ...	926	40,921	5,652	580	56
.....	....	.....	12,800	316	.....	734	32,798	690	8,414	57
.....	100	264	314	438	.....	54	4,643	454	754	58
.....	.....	6,232	10.000	15,370	.....	538	80,148	368	10,379	59
.....	.....	.....	2.500	57	.....	40	9,195	896	.....	60
.....	435	14,326	10,838	20,071	.....	4,773	153,261	.....	4,479	61
.....	.....	661	.....	67	.....	281	13,645	4,277	1,168	62
.....	266	14,196	26,285	12,247	176	922	100,160	....	49,402	63
.....	.....	.....	.....	7	.....	185	876	44	1,011	64
.....	.....	407	.. .. ..	902	.....	54	5,417	1,739	2,148	65
.....	.....	.....	.....	.....	.....	377	4,875	1,737	213	66
.....	832	1,680	17,000	1,932	508	847	78,912	9,488	1,319	67
108	70	670	4,586	779	.....	255	10,816	.....	352	68
.....	.....	2,307	6,000	1,270	66	326	28,407	5,817	4,939	69
.....	192	1,344	1,279	1,757	.....	200	9,939	1,494	85	70
253	.....	3,508	9,000	4,562	.....	1,364	45,984	1,845	14,727	71
.....	251	1,520	5,509	1,967	.....	438	33,526	1,206	36	72
.....	.....	4,354	.....	2,701	20	208	15,957	5,422	3,707	73
.....	236	1,133	3,340	740	165	135	11,320	1,675	916	74
1,621	913	3,382	22,168	8,577	870	346	91,943	.....	6,954	75
1,939	.....	454	.....	520	.....	76	12,745	537	4,869	76
7,500	100	1,753	.....	1,089	.....	441	32,621	1,610	.....	77
.....	.....	2,542	300	719	.....	573	11,187	1,495	4,610	78
.....	.....	658	2,150	381	.. ....	1,854	7,453	2,187	169	79
.....	.....	.....	450	8	.....	70	2,485	247	27	80
.....	779	2,244	18,325	3,368	.....	256	34,011	.....	13,619	81
260	.....	1,642	4,050	735	500	*10,971	28,578	3,404	119	82
2,280	.....	546	.....	3,346	.....	431	18,092	3,864	1,030	83
3,206	418	542	1,149	220	.....	797	18,220	390	521	84
76	.....	.....	.....	.....	.....	366	5,448	.. ...	67	85

* Including $9,078 bonus to Canning Co.

STATISTICS OF ONTARIO VILLAGE AND TOWN

RECEIPTS, DISBURSEMENTS,

Villages and Towns.	Assets on December 31, 1907.—*Continued.*						Liabilities Dec. 31	
	Sinking Fund investments and deposits.	All other investments and deposits.	Water works and electric light plant.	Other property.	Miscellaneous.	Total assets.	County levy.	Local school rates.
	$	$	$	$	$	$	$	$
43. Cache Bay			1,500	4,015		5,647		300
44. Caledonia				6,200		6,421		
45. Campbellford		805	33,000	9,025	202	44,820		
46. Cannington				9,000	3,170	13,196		
47. Cardinal				3,400	1,172	5,477		
48. Carleton Place		9,000		69,000	20,000	98,143		8,733
49. Casselman	774			500	268	2,495		
50. Cayuga		4,000		11,700	119	17,203		1,000
51. Chatsworth	305			1,262	34	2,661		
52. Chesley	6,161			10,300	20,060	39,038		
53. Chesterville		750	130	1,750	300	3,353		
54. Chippewa		500	1,100	4,650	6,900	14,832		1,048
55. Clifford			2,950	2,150	25	6,999		
56. Clinton	27,650	39,957		24,300		98,139		
57. Cobalt				10,724	3,190	23,018		352
58. Cobden				1,980	5,250	8,438	210	
59. Cobourg	4,243			158,000	5,797	178,787		927
60. Colborne				3,790	500	5,186		
61. Collingwood	8,491	31,000	151,536	192,000	18,294	400,800		
62. Copper Cliff				4,930		10,375		1,512
63. Cornwall		26,800	139,747	49,900	4,442	270,291		17,261
64. Courtright				510	71	1,636		680
65. Creemore			22,000	190		26,077	371	1,260
66. Delhi				100		2,050		1,152
67. Deseronto			60,705	8,616	1,010	81,138		2,477
68. Drayton		108		17,400	10	17,870	356	
69. Dresden			9,273	26,865	1,126	48,020	599	392
70. Dundalk			6,000	10,500	13,598	31,677		1,000
71. Dundas	30,022	16,948	56,573	70,764	8,463	199,342		
72. Dunnville	3,308	1,800	30,000	11,158	18,435	65,943		2,400
73. Durham		15,000		8,600	36	32,765		
74 Dutton				8,700	198	11,489		
75. East Toronto	29,096	21,394	119,274	16,694	7,343	200,755		3,079
76. Eganville		404		19,655	275	25,740		1,991
77. Elmira		15,500	16,422	1,200	1,179	35,911		
78. Elora		5,500		12,500	208	24,313		2,630
79. Embro				8,000		10,356		1,422
80. Erin				2,100		2,374		
81. Essex			33,000	5,700	11,361	63,680	764	1,500
82. Exeter		225	2,800	16,535	250	23,333		3,857
83. Fenelon Falls		2,280	72,200	8,405	445	88,224		2,632
84. Fergus		16,420		19,500	66	36,897		152
85. Finch		76				143		

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Liabilities on December 31, 1907.—*Continued.*									
Railway debentures.	School debentures.	Water works debentures.	Electric light debentures.	All other debentures.	Loans for current expenses and interest.	Due Sinking Fund.	Miscellaneous.	Total liabilities.	No.
$.	$	$	$	$	$	$	$	$	
.....	1,499	.....	.....	.....	1,867	.....	652	4,318	43
2,000	.....	.....	.....	.....	662	.....	.....	2,662	44
.....	1,952	8,648	13,084	9,817	3,116	.....	190	36,807	45
.....	.....	.....	.....	2,761	932	.....	182	3,875	46
.....	1,389	.....	.....	.....	2,350	.....	100	3,839	47
15,000	.....	.....	.....	71,600	808	.....	200	96,341	48
.....	.....	.....	.....	2,000	1,002	.....	.....	3,002	49
.....	.....	.....	.....	19,487	1,100	.....	444	23,031	50
.....	.....	.....	.....	4,000	.....	.....	25	4,025	51
.....	11,789	.....	.....	33,295	.....	.....	102	45,186	52
.....	6,477	.....	.....	7,756	.....	.....	.....	14,233	53
.....	.....	.....	.....	3,109	.....	.....	500	4,657	54
.....	.....	.....	.....	8,319	.....	.....	25	8,344	55
.....	1,402	.....	.....	98,602	.....	.....	11	100,015	56
.....	.....	.....	.....	.....	2,000	.....	10,692	13,044	57
.....	5,122	.....	.....	5,764	.....	.....	211	11,307	58
.....	44,280	.....	.....	203,200	13,158	.....	1,424	262,989	59
.....	.....	.....	.....	.....	.....	.....	.....	.....	60
.....	7,522	50,979	88,282	257,754	58,372	.....	978	463,887	61
.....	.....	.....	.....	686	.....	.....	†2,703	4,901	62
.....	11,479	114,005	.....	162,173	22,150	.....	.....	327,068	63
.....	.....	.....	.....	.....	.....	.....	386	1,066	64
.....	.....	20,899	.....	.....	820	.....	.....	23,350	65
.....	.....	.....	.....	.....	.....	.....	700	1,852	66
20,280	1,790	46,723	*20,000	1,659	.....	.....	590	93,519	67
.....	3,662	.....	.....	11,686	883	.....	656	17,243	68
.....	.....	.....	8,817	28,120	2,000	.....	187	40,115	69
.....	7,201	.....	3,453	16,832	.....	.....	.....	28,486	70
.....	.....	47,134	.....	52,598	.....	.....	791	100,523	71
.....	11,794	11,002	.....	18,570	.....	.....	513	44,279	72
.....	.....	.....	.....	54,446	.....	.....	458	54,904	73
1,938	2,002	.....	.....	10,525	.....	.....	35	14,500	74
.....	63,851	79,836	5,583	91,317	12,919	2,234	4,460	263,279	75
.....	.....	.....	.....	15,618	.....	.....	.....	17,609	76
4,693	2,804	.....	.....	16,375	23,922	.....	.....	47,794	77
.....	.....	.....	.....	11,158	.....	.....	100	13,888	78
.....	.....	.....	.....	4,524	1,900	.....	.....	7,846	79
.....	.....	.....	.....	.....	.....	.....	.....	.....	80
.....	5,341	20,162	.....	28,348	10,601	.....	165	66,881	81
4,123	.....	.....	.....	15,097	.....	.....	.....	23,077	82
.....	.....	*68,250	.....	12,954	.....	.....	7,067	90,903	83
5,479	2,146	.....	.....	596	.....	2,057	572	11,002	84
.....	.....	.....	.....	.....	4,058	.....	272	4,330	85

* Gas plant.

† Including $2,638 payable to McKim Township, as share of school debentures.

STATISTICS OF ONTARIO VILLAGE AND TOWN

RECEIPTS, DISBURSEMENTS,

Village and Town Municipalities and Counties in which located.	Receipts, 1907.							
	Balance from 1906.	Municipal and school taxes.	Licenses.	Fees, rents, fines, etc.	Water, electric light and gas rates.	Interest and dividends.	Refund of money invested.	Borrowed for current expenses.
	$	$	$	$	$	$	$	$
86. Forest, Lambton	377	14,272	240	344				12,449
87. Fort Erie, Welland	3,358	8,513	789	84		17		
88. Fort Frances, Rainy River	4,197	19,055	951	582		2,123	11,048	20,603
89. Galt, Waterloo		102,888	2,645	3,813	18,355	7,734	24,054	85,492
90. Gnanoque, Leeds	8,573	34,950	1,446	705	4,333	739	4,306	10,000
91. Garden Island, Frontenac	593	1,648						
92. Georgetown, Halton		9,672	282	153	2,894	4	500	5,000
93. Glencoe, Middlesex	33	6,574	293	151				17,665
94. Goderich, Huron	4,043	38,889	1,478	241	15,140	2,850	11,590	77,273
95. Gore Bay, Manitoulin	178	3,508	229	39		6		1,600
96. Grand Valley, Dufferin	771	4,465	318	51		16	53	18,238
97. Gravenhurst, Muskoka	11	13,969	774	449	6,659	14	1,717	12,708
98. Grimsby, Lincoln		11,787	10	432	2,314	70	3,107	6,404
99. Hagersville, Haldimand	1,592	5,471	313	18		64	4,586	2,000
100. Haileybury, Nipissing	2,587	16,528	963	952				74,514
101. Hanover, Grey	3,130	12,102	575	44	954	13		14,936
102. Harriston, Wellington	2,742	14,263	512	269		102	500	12,907
103. Hastings, Northumberland	210	3,797	336	140				800
104. Havelock, Peterborough	1,683	5,223	281	216				2,700
105. Hawkesbury, Prescott		14,586	1,755	387	6,511		8,116	6,077
106. Hensall, Huron		4,493	1	6		23	1,804	3,606
107. Hepworth, Bruce		1,786						150
108. Hespeler, Waterloo		16,701	611	400	3,500	911	1,700	14,168
109. Hintonburg, Carleton	202	20,170	291	99	4,687	91	235	6,003
110. Holland Landing, York	168	977	100	32	765			
111. Huntsville, Muskoka	328	16,843	601	149	11,088			9,959
112. Ingersoll, Oxford		48,428	1,627	1,188		2,331	36,182	33,807
113. Iroquois, Dundas	4,015	10,076	173	569	2,966			
114. Kemptville, Grenville	7	10,654	373	69		19	2,750	3,000
115. Kenora, Kenora		58,784	3,669	6,118	46,494	348	564	132,045
116. Keewatin, Kenora		10,428	729	220				995
117. Kincardine, Bruce	2,571	16,789	904	327	8,180	631	4,612	30,784
118. Kingsville, Essex	79	13,199	420	339	1,457			12,744
119. Lakefield, Peterborough	44	8,164	73	165		359	405	9,300
120. Lanark, Lanark	775	4,959	213	128				1,200
121. Lancaster, Glengarry	255	2,514	238	4				900
122. Latchford, Nipissing		3,321		70	899	1		1,100
123. Leamington, Essex	4,235	19,199	1,164	272	21,730	80		3,685
124. Lindsay, Victoria	391	74,738	2,606	1,658	12,764	2,179	20,103	39,558
125. Listowel, Perth		23,591	999	126	2,646	1,033	9,203	12,043
126. Little Current, Manitoulin	1,255	3,358	85	209				
127. L'Orignal, Prescott	237	3,675	459					
128. Lucan, Middlesex	672	5,311	252	63		296	100	983

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSES AND LIABILITIES, 1907.—*Continued.*

Receipts, 1907.—*Continued*						Disbursements, 1907.					
Borrowed on debentures for schools.	Borrowed on debentures for other purposes.	Premiums on debentures sold.	County grants.	Miscellaneous.	Total receipts.	Allowances, salaries and commissions.	Lighting of streets, water supply and fire protection.	Law costs.	Other expenses of municipal government.	Streets, bridges and parks.	No.
$	$	$	$	$	$	$	$	$	$	$	
.....	875	.....	.....	345	28,902	436	1,323	59	663	3,501	86
.....	.....	.....	.....	201	12,962	347	99	20	231	3,186	87
.....	43,500	.....	.....	327	102,386	1,071	1,154	440	951	1,200	88
3,000	13,360	.....	.....	4,324	265,665	4,184	23,073	564	3,090	29,080	89
.....	15,000	.....	.....	567	80,619	928	5,453	1,019	775	7,017	90
.....	.....	.....	.....	19	2,260	25	.....	.....	12	62	91
.....	.....	.....	.....	122	18,627	745	1,210	.....	184	1,052	92
.....	10,654	.....	56	*7,622	43,048	257	756	1	227	3,499	93
.....	.....	.....	.....	1,611	153,115	1,918	15,492	189	1,763	12,460	94
.....	.....	.....	.....	21	5,581	299	82	130	72	945	95
.....	3,774	.....	.....	1,018	28,704	239	407	529	338	980	96
.....	.....	.....	.....	1,296	37,627	1,252	1,187	255	6,663	1,366	97
.....	.....	.....	.....	1,327	25,451	278	2,615	30	233	1,561	98
.....	.....	.....	.....	546	14,590	453	190	.....	439	4,580	99
5,500	†44,000	.....	.....	35	145,079	1,129	9,498	342	1,073	16,823	100
.....	.....	.....	.....	224	31,978	482	3,043	62	389	3,185	101
6,500	.....	.....	29	548	38,372	737	1,584	.....	599	668	102
.....	.....	.....	52	65	5,430	184	492	10	224	798	103
.....	2,600	.....	.....	162	12,865	189	737	15	111	3,372	104
.....	15,525	.....	.....	308	53,264	892	5,780	.....	457	11,124	105
.....	.....	.....	200	7	10,140	158	314	28	184	2,181	106
.....	.....	.....	100	208	2,244	66	.....	16	163	288	107
.....	19,736	50	.....	800	58,577	791	5,329	.....	642	3,702	108
.....	.....	.....	.....	148	31,926	2,000	6,152	238	672	1,814	109
.....	.....	.....	.....	43	2,085	115	.....	3	24	393	110
.....	.....	.....	.....	21	38,992	1,243	4,822	191	‡4,697	2,453	111
.....	.....	.....	.....	4,711	128,274	2,012	7,456	167	1,273	3,575	112
.....	.....	.....	.....	491	18,290	142	1,826	.....	130	213	113
.....	.....	.....	.....	6	16,878	224	860	49	253	823	114
.....	7,467	.....	.....	2,682	258,171	2,755	26,394	600	2,150	10,846	115
.....	.....	.....	.....	.....	12,372	1,297	.....	58	886	2,079	116
2,500	2,500	.....	163	1,245	71,206	927	6,051	306	1,785	10,437	117
.....	1,000	8	.....	128	29,374	746	2,414	10	221	7,106	118
.....	.....	.....	100	251	18,861	208	717	.....	337	3,044	119
.....	.....	.....	.....	118	7,393	538	250	.....	226	561	120
.....	.....	.....	.....	57	3,968	280	90	.....	83	786	121
.....	.....	.....	.....	.....	5,391	658	58	.....	74	736	122
.....	.....	.....	.....	457	50,822	1,471	4,422	350	§10,561	5,167	123
.....	.....	.....	249	493	154,739	3,414	16,558	312	1,972	10,141	124
.....	12,127	.....	5,094	31	66,893	645	4,406	6	551	15,734	125
.....	.....	.....	.....	27	4,934	422	458	.....	132	304	126
.....	.....	.....	50	82	4,503	229	482	.....	42	988	127
.....	.....	.....	36	.....	7,713	250	310	.....	157	733	128

* Including $6,931 refund of loan made to Knitting Factory in 1906.
† Comprising local improvements, $10,000; waterworks, $24,000; fire appliances, $10,000.
‡ Including $3,728, maintenance electric light and power supplied private users.
§ Including $9,816 maintenance of natural gas, supplied private users.

STATISTICS OF ONTARIO VILLAGE AND TOWN

RECEIPTS, DISBURSEMENTS,

Villages and Towns.	Disbursements, 1907.—*Continued*							
	Waterworks and electric light construction.	Buildings and other works.	Board of Health.	Support of the poor and other charities.	Administration of justice, including police services.	County Treasurer for levies.	Payment on account of schools and education.	Sinking Fund investments and deposits.
	$	$	$	$	$	$	$	$
86. Forest	.....	.....	42	172	412	758	3,800	199
87. Fort Erie	3,176	.....	.....	88	140	303	2,918	.....
88. Fort Frances	44,690	188	96	80	833	.....	3,597	672
89. Galt	25,416	2,700	384	1,498	3,357	4,846	39,636	32,535
90. Gananoque	5,036	78	6	160	1,582	1,539	10,000	6,311
91. Garden Island	.....	.....	.....	6	.....	325	927	.....
92. Georgetown	.....	185	46	146	.....	530	3,610	.....
93. Glencoe	.....	.....	65	5	10	589	1,718	.....
94. Goderich	7,395	.....	440	700	1,106	.....	9,966	5,228
95. Gore Bay	.....	236	.....	67	144	.....	1,776	31
96. Grand Valley	.....	222	32	112	55	298	2,504	.....
97. Gravenhurst	2,086	614	135	189	565	.....	5,832	23
98. Grimsby	1,058	947	.....	59	75	840	2,897	1,866
99. Hagersville	.....	.....	.....	138	59	672	2,624	.....
100. Haileybury	24,000	10,000	1,344	35	1,200	11,942	.....	.....
101. Hanover	.....	358	36	14	46	653	4,161	.....
102. Harriston	.....	491	16	66	270	924	8,154	.....
103. Hastings	.....	144	10	15	96	371	1,378	.....
104. Havelock	.....	521	106	.....	181	325	2,951	.....
105. Hawkesbury	.....	1,350	22	.....	552	845	6,300	.....
106. Hensall	.....	.....	9	15	37	376	1,395	.....
107. Hepworth	.....	.....	.....	.....	4	120	794	.....
108. Hespeler	70	854	43	100	425	1,003	4,450	.....
109. Hintonburg	632	.....	222	.....	200	.....	6,320	83
110. Holland Landing	.....	.....	168	36	4	121	498	.....
111. Huntsville	.....	.....	30	78	682	.....	5,268	.....
112. Ingersoll	.....	.....	2,359	469	1,588	2,970	11,462	13,263
113. Iroquois	.....	254	.....	.....	13	967	2,838	.....
114. Kemptville	.....	.....	51	137	281	.....	6,270	.....
115. Kenora	90,319	2,369	303	152	4,161	.....	18,169	194
116. Keewatin	.....	642	627	10	.....	.....	4,800	.....
117. Kincardine	2,607	62	100	90	665	852	8,656	4,365
118. Kingsville	518	.....	100	153	302	728	2,667	.....
119. Lakefield	.....	.....	18	.....	246	.....	2,430	1,431
120. Lanark	.....	.....	.....	5	66	556	1,900	.....
121. Lancaster	.....	.....	.....	56	15	185	1,033	.....
122. Latchford	.....	763	5	32	318	.....	1,350	.....
123. Leamington	1,234	768	81	280	689	1,435	5,900	.....
124. Lindsay	3,607	582	608	1,433	2,364	4,438	19,702	1,060
125. Listowel	1,123	40	.....	135	391	1,268	5,965	11,442
126. Little Current	.....	.....	4	10	243	.....	2,184	.....
127. L'Orignal	.....	.....	20	8	6	676	1,766	.....
128. Lucan	.....	.....	.....	50	44	439	2,316	770

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued*

ASSETS AND LIABILITIES, 1907.—*Continued*.

Disbursements, 1907.—*Continued*								Assets, Dec. 31, '07		
Other investments and deposits.	School debentures redeemed.	All other debentures redeemed.	Refund of moneys borrowed for current expenses.	Interest on loans advances and debentures.	Discount on debentures sold.	Miscellaneous.	Total disbursements.	Cash in treasury.	Taxes in arrears.	No.
$	$	$	$	$	$	$	$	$	$	
.....	1,168	2,759	10,871	1,238	.....	361	27,762	1,140	951	86
.....	.....	599	.....	301	.....	136	11,544	1,418	997	87
56	....	1,051	36,603	5,318	.....	1,590	99,590	2,796	16,141	88
193	.....	14,197	26,768	33,143	.....	*21,001	265,665	.....	10,613	89
.....	4,300	1,409	25,000	9,695	.....	308	80,616	3	2,481	90
.....	.....	.....	.....	.....	.....	250	1,607	653	.....	91
.....	1,200	1,410	5,089	2,955	.....	254	18,616	11	1,724	92
8,500	655	593	24,527	954	.....	436	42,792	256	1,737	93
2,137	.....	20,878	55,000	14,129	.....	1,985	150,786	2,329	7,029	94
.....	.....	.....	1,600	57	.....	23	5,462	119	548	95
.....	.....	349	21,500	479	96	464	28,604	100	446	96
280	188	2,021	9,000	4,107	.....	596	36,359	1,268	5,066	97
191	431	1,963	5,670	3,961	.....	776	25,451	.....	808	98
86	396	715	2,000	543	.....	149	13,044	1,546	192	99
.....	.....	1,795	59,936	1,714	500	1,071	142,402	2,677	14,174	100
.....	103	923	12,679	1,829	.....	609	28,572	3,406	2,201	101
.....	80	2,546	16,294	2,971	366	936	36,702	1,670	875	102
.....	.....	.....	800	81	.....	153	4,756	674	.....	103
.....	.....	149	3,400	446	.....	224	12,727	138	1,991	104
.....	.....	4,157	14,211	7,166	.....	408	53,264	.....	11,301	105
1,323	.....	1,345	2,013	606	.....	123	10,107	33	571	106
.....	.....	.....	150	3	.....	307	1,911	333	.....	107
25,796	737	2,947	7,735	2,654	.....	1,299	58,577	.....	1,716	108
4,828	171	2,863	.....	4,724	.....	493	31,412	514	9,719	109
.....	.....	.....	700	14	.....	9	2,085	.....	481	110
.....	810	1,448	13,459	3,313	.....	435	38,929	63	2,109	111
6,264	.....	35,838	28,174	9,984	.....	1,420	128,274	.....	10,600	112
1,646	167	3,884	.....	4,368	.....	299	16,747	1,543	.....	113
.....	.....	.....	6,250	968	.....	542	16,708	170	5,800	114
53	2,094	9,832	58,293	23,565	....	5,855	258,104	67	19,696	115
.....	188	1,033	184	379	.....	189	12,372	.....	1,826	116
852	157	1,789	24,400	3,395	200	1,581	69,277	1,929	3,405	117
.....	240	3,131	8,000	2,221	.....	756	29,313	61	976	118
120	262	151	8,000	1,417	.....	355	18,736	125	19	119
.....	372	387	1,200	287	.....	282	6,630	763	.....	120
.....	.....	.....	1,300	27	.....	111	3,966	2	186	121
.....	.....	.....	1,100	57	.....	47	5,198	193	2,242	122
.....	1,265	4,108	3,735	3,845	.....	290	45,601	5,221	9,629	123
24	20,232	14,650	28,819	17,854	.....	6,503	154,273	466	23,402	124
.....	.....	3,121	13,783	7,146	414	723	66,893	.....	502	125
.....	.....	.....	.....	.....	.....	50	3,807	1,127	828	126
.....	.....	.....	.....	.....	.....	20	4,237	266	1,608	127
.....	.....	328	700	734	.....	266	7,097	616	180	128

* Including $15,000 bonus to Canada Brass Foundry Co.

STATISTICS OF ONTARIO VILLAGE AND TOWN

RECEIPTS, DISBURSEMENTS,

Villages and Towns.	Assets on December 31st, 1907.—*Continued.*						Liabilities, Dec. 31	
	Sinking Fund investments and deposits.	All other investments and deposits.	Waterworks and electric light plant.	Other property.	Miscellaneous.	Total assets.	County levy.	Local school rates.
	$	$	$	$	$	$	$	$
86. Forest	199			17,750	205	20,245		
87. Fort Erie			3,176	10,065		15,656		1,000
88. Fort Frances	1,354	1,715	52,304	30,362	390	105,062		2,750
89. Galt	129,760	193	172,740	233,500	161,084	707,890		
90. Gananoque	41,596	14,000	145,000	23,500		226,580		
91. Garden Island						653		
92. Georgetown		7,500	40,000	11,600		60,835		
93. Glencoe		11,300		9,125	225	22,643	800	
94. Goderich	43,505	40,137	121,140	20,350	20,810	255,300	2,134	
95. Gore Bay	100	500	250	3,843		5,660		308
96. Grand Valley				2,845		3,391		
97. Gravenhurst	242	280	32,015	28,750	48	67,669		350
98. Grimsby	1,866	12,191	43,000	12,500	3,440	73,805	870	
99. Hagersville		86	684	1,450	248	4,206		521
100. Haileybury			24,000	10,973	15,159	67,283		2,245
101. Hanover			26,000		138	31,745		
102. Harriston		19,500		15,700	170	37,915		
103. Hastings				7,400		8,074		
104. Havelock				7,490		9,619		
105. Hawkesbury		20,353		120,900	14,768	167,322	1,227	
106. Hensall		4,323	25	600	6,218	11,770		
107. Hepworth				15		348		
108. Hespeler		46,468	11,800	20,388	2,046	82,418		
109. Hintonburg	2,890	1,828	103,492	10,593	3,824	135,860	781	4,817
110. Holland Land'g				505	40	1,026	138	96
111. Huntsville			58,543	8,400	2,242	71,357		
112. Ingersoll	64,546	44,863		33,680	16,415	200,104		
113. Iroquois		6,756	50,000	7,000	4,597	69,896		
114. Kemptville				11,000		16,970	545	2,500
115. Kenora	16,877	185	566,046	53,431	91,628	747,930		3,831
116. Kerwatin				11,250	3,914	16,990		
117. Kincardine	18,229	852	65,109	44,444	2,700	136,668		4,414
118. Kingsville			34,500	27,100	1,232	63,869		500
119. Lakefield	10,947	120		10,300	3,268	24,779	753	
120. Lanark				9,700		10,463		
121. Lancaster				610		798		200
122. Latchford				3,300		5,735		
123. Leamington			48,000	12,300	11,544	89,694		6,516
124. Lindsay	11,144	11,018	95,617	58,000	78,512	278,159		
125. Listowel	20,583	19,500	43,000	12,500	750	96,835		
126. Little Current				4,135		6,090		
127. L'Orignal					55	1,929		1,091
128. Lucan	7,733			3,700		12,229		

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Liabilities on December 31st, 1907.—*Continued.*

Railway debentures.	School debentures.	Waterworks debentures.	Electric light debentures.	All other debentures.	Loans for current expenses and interest.	Due Sinking Fund.	Miscellaneous.	Total liabilities.	No.
$	$	$	$	$	$	$	$	$	
.....	1,951	.....	.....	10,296	3,849	.....	184	16,280	86
.....	.....	.....	.....	3,473	1,890	.....	.....	6,363	87
.....	.....	42,873	.....	33,576	8,000	.....	‖5,132	92,331	88
.....	98,200	172,531	.....	438,689	85,492	.....	100	795,012	89
14,700	22,236	176,000	.....	21,771	.....	.....	.....	234,707	90
.....	.....	.....	.....	.....	.....	.....	.....	.....	91
.....	2,500	36,300	.....	13,186	5,000	.....	.....	56,986	92
.....	686	.....	.....	20,913	975	.....	.....	23,374	93
18,486	5,000	73,620	18,719	182,179	31,099	1,802	795	333,834	94
.....	500	.....	.....	.....	.....	.....	12	820	95
.....	.....	.....	.....	11,985	38	.....	1,375	13,398	96
.....	3,994	.....	27,729	46,111	7,199	87	393	85,863	97
.....	16,504	43,343	.....	24,143	3,404	.....	7,402	95,666	98
.....	1,311	.....	.....	9,863	.....	.....	.....	11,695	99
.....	5,500	24,000	.....	18,205	30,914	.....	5,000	85,864	100
.....	5,799	22,042	.....	22,745	7,280	.....	652	58,518	101
.....	10,769	60,147	.....	.....	.....	.....	2,749	73,665	102
.....	.....	.....	.....	.....	1,000	.....	.....	1,000	103
.....	.....	.....	.....	5,089	2,100	.....	218	7,407	104
5,820	.....	92,436	.....	63,662	47,152	.....	1,103	211,400	105
.....	.....	.....	.....	11,897	1,606	.....	.....	13,503	106
.....	.....	.....	.....	.....	2,635	.....	.....	2,635	107
.....	10,658	.....	15,361	41,399	14,168	.....	1,451	83,037	108
.....	5,679	71,622	.....	19,574	15,003	.....	75	117,551	109
.....	.....	.....	.....	.....	265	.....	72	571	110
.....	16,633	19,304	22,560	.....	.....	.....	163	58,660	111
20,000	5,144	.....	.....	178,442	33,807	.....	2,678	240,071	112
.....	.....	37,701	5,400	32,039	2,050	.....	189	77,379	113
.....	.....	.....	.....	10,933	.....	.....	210	14,188	114
.....	26,015	199,738	.....	73,030	303,639	11,625	102,324	720,202	115
.....	*3,914	.....	.....	†9,640	995	.....	600	15,149	116
.....	10,691	40,279	.....	27,662	4,500	1,884	3,396	92,826	117
.....	2,707	22,356	‡10,355	4,443	4,744	.....	590	45,695	118
.....	3,283	.....	.....	25,064	2,900	.....	50	32,050	119
.....	839	.....	.....	3,490	.....	.....	.....	4,329	120
.....	.....	.....	.....	.....	.....	.....	27	227	121
.....	.....	.....	.....	.....	.....	.....	2,500	2,500	122
.....	9,127	20,705	12,167	29,999	50	.....	1,808	80,372	123
21,480	24,355	84,943	.....	227,362	49,906	302	1,014	409,362	124
.....	.....	29,316	.....	129,390	4,543	1,500	.....	164,749	125
.....	.....	.....	.....	1,857	.....	.....	521	2,378	126
.....	.....	.....	.....	.....	.....	.....	98	1,189	127
.....	9,000	.....	.....	6,516	.....	463	.....	15,979	128

* Including $4,102 transferred from Keewatin Township at close of 1906, less payment in 1907.

† Including $10,675 transferred from Keewatin Township, less payment in 1907.

‡ Natural gas-light plant.

‖ Including $2,413 payable to McIrvine t'p. as share of school debentures.

STATISTICS OF ONTARIO VILLAGE AND TOWN

RECEIPTS, DISBURSEMENTS,

Villages and Town Municipalities and Counties in which located.	Receipts, 1907.							
	Balance from 1906.	Municipal and school taxes.	Licenses.	Fees, rents, fines, etc.	Water, electric light and gas rates.	Interest and dividends.	Refund of money invested.	Borrowed for current expenses.
	$	$	$	$	$	$	$	$
129. Lucknow, Bruce	21	10,189	321	103	.....	191	1,025	.....
130. Madoc, Hastings	101	6,691	212	36	3,305	.....	21	8,384
131. Markdale, Grey	700	5,704	195	109	.....	1	.....	4,500
132. Markham, York	670	6,728	210	82	1,595	1	250	3,365
133. Marmora, Hastings	988	3,848	179	6	.....	.....	.....	215
134. Massey, Sudbury	471	4,015	605	83	.....	.....	.....	15,203
135. Mattawa, Nipissing	86	10,474	1,005	157	.....	6	568	827
136. Maxville, Glengarry	953	3,395	187	.....	.....	.....	.....	500
137. Meaford, Grey	2,849	34,149	587	1,190	3,396	1,130	4,530	107,400
138. Merrickville, Grenville	373	6,715	223	384	.....	.....	.....	4,683
139. Merritton, Lincoln	.....	16,001	281	.....	5,393	135	245	.....
140. Midland, Simcoe	.....	36,189	476	376	18,163	.....	.....	30,653
141. Millbrook, Durham	430	4,544	469	66	.....	.....	.....	1,100
142. Milton, Halton	2,713	15,867	284	252	4,895	203	6,601	9,500
143. Milverton, Perth	572	5,059	166	10	.....	.....	.....	5,131
144. Mitchell, Perth	.....	18,127	620	309	3,687	291	.....	51,033
145. Morrisburg, Dundas	.....	17,527	424	5	7,391	893	.....	108,076
146. Mount Forest, Wellington	88	20,735	894	357	8,634	1,513	9,491	86,500
147. Napanee, Lennox & Add	349	29,838	1,613	961	5,204	.....	.....	8,335
148. Neustadt, Grey	.....	2,324	.....	.....	.....	.....	.....	625
149. Newboro, Leeds	476	1,951	169	31	.....	.....	.....	.....
150. Newburgh, Lennox & Add	250	3,506	83	27	.....	44	.....	.....
151. Newbury, Middlesex	71	2,122	94	27	.....	.....	.....	300
152. Newcastle, Durham	6	4,327	62	81	.....	.....	.....	.....
153. New Hamburg, Waterloo	.....	8,829	600	53	.....	.....	.....	4,617
154. New Liskeard, Nipissing	.....	22,682	1,674	399	450	1,136	.....	15,077
155. Newmarket, York	4,997	19,367	758	376	8,249	.....	.....	7,647
156. Niagara, Lincoln	408	13,396	505	589	3,057	.....	.....	22,350
157. North Bay, Nipissing	2,519	22,842	2,478	1,698	12,741	61	.....	189,092
158. North Toronto, York	3,359	29,588	38	412	4,952	1,295	212	55,023
159. Norwich, Oxford	3,698	10,664	313	54	.....	356	4,064	3,500
160 Norwood, Peterborough	203	5,776	195	201	.....	.....	.....	12,928
161. Oakville, Halton	1,001	21,556	274	437	3,879	248	.....	90,963
162. Oil Springs, Lambton	.....	7,218	337	27	.....	24	.....	4,500
163. Omemee, Victoria	100	2,995	94	4	.....	.....	.....	1,375
164. Orangeville, Dufferin	1,025	24,993	1,466	222	2,926	851	6,338	15,235
165. Orillia, Simcoe	46,550	39,723	2,211	1,455	36,656	626	.....	.....
166. Oshawa, Ontario	.....	45,592	1,370	1,492	5,445	445	14,755	12,464
167. Ottawa East, Carleton	.....	10,874	200	43	.....	40	.....	4,421
168. Owen Sound, Grey	69,623	104,795	1,170	4,488	51,232	8,944	41,121	129,864
169. Paisley, Bruce	2,912	6,770	300	625	8	41	.....	1,500
170. Palmerston, Wellington	.....	19,370	453	77	3,076	1,115	4,493	27,500
171. Paris, Brant	2,846	26,251	1,653	851	11,765	.....	.....	19,300

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Receipts, 1907.—*Continued.*						Disbursements, 1907.					No.
Borrowed on debentures for schools.	Borrowed on debentures for other purposes.	Premiums on debentures sold.	County grants.	Miscellaneous.	Total receipts.	Allowances, salaries and commissions.	Lighting of streets, water supply and fire protection.	Law costs.	Other expenses of municipal government.	Streets, bridges and parks.	
$	$	$	$	$	$	$	$	$	$	$	
.....	576	.....	.....	2	12,428	366	2,092	.....	541	.....	129
.....	.....	.....	.....	451	19,201	374	3,222	.....	122	1,479	130
.....	.....	.....	.....	490	11,699	213	284	36	272	3,957	131
3,500	.....	.....	5,500	775	22,676	208	1,859	25	230	11,002	132
.....	.....	.....	.....	529	5,765	277	393	.....	143	724	133
.....	.....	.....	.....	67	20,444	286	245	93	203	134	134
.....	.....	.....	.....	3	13,126	400	888	59	388	497	135
.....	3,528	.....	.....	43	8,606	122	180	17	103	1,657	136
.....	13,000	.....	.....	*14,610	182,841	1,801	4,038	500	1,011	3,725	137
.....	.....	.....	.....	334	12,712	316	1,004	167	246	730	138
.....	.....	.....	.....	344	22,399	1,106	2,598	7	213	3,431	139
.....	†26,850	.....	667	2,830	116,204	1,942	7,349	378	§7,162	4,855	140
.....	.....	.....	.....	230	6,839	298	343	90	285	1,215	141
.....	.....	.....	.....	287	40,602	818	3,916	35	293	11,796	142
.....	.....	.....	265	551	11,754	235	114	150	274	1,344	143
.....	6,586	.....	1,182	281	82,116	692	5,708	62	578	9,848	144
.....	‡76,100	.....	.....	33	210,449	596	3,690	319	402	1,115	145
.....	21,169	.....	.....	225	149,606	720	9,166	304	631	2,557	146
.....	.....	.....	245	583	47,128	2,540	10,514	.....	890	5,092	147
.....	.....	.....	.....	10	2,959	96	67	.....	299	787	148
.....	4,000	.....	.....	91	6,718	87	.....	29	94	4,289	149
.....	.....	.....	59	60	4,029	182	.....	110	145	940	150
.....	252	.....	153	50	3,069	104	61	5	132	810	151
.....	.....	.....	.....	83	4,559	312	182	.....	160	1,059	152
.....	.....	.....	71	42	14,112	413	1,024	12	542	1,273	153
.....	‖60,000	.....	.....	**4,826	106,244	2,705	3,103	.....	505	14,608	154
.....	.....	.....	.....	418	41,812	1,095	5,907	35	837	3,655	155
.....	.....	.....	.....	253	40,558	780	4,235	418	428	10,550	156
.....	.....	.....	.....	379	231,810	1,836	11,536	2,875	1,491	7,464	157
.....	8,769	.....	.....	300	103,948	1,620	8,034	757	1,196	26,935	158
.....	5,000	.....	1,307	‖‖4,698	33,654	440	1,497	5	310	4,699	159
.....	.....	.....	.....	147	19,450	203	500	35	300	3,764	160
.....	.....	.....	.....	116	118,474	952	1,758	473	967	17,580	161
.....	1,104	21	.....	58	13,289	443	6	1,146	404	1,502	162
.....	.....	.....	.....	51	4,619	178	82	56	131	427	163
.....	5,280	.....	.....	157	58,493	995	4,091	166	814	4,283	164
.....	.....	.....	.....	1,905	129,126	1,945	13,048	26	2,414	7,503	165
.....	10,700	.....	.....	$z^3$8,484	100,747	2,272	7,760	1,025	2,816	8,234	166
.....	3,290	.....	.....	333	19,201	1,317	1,577	.....	163	4,810	167
10,000	¶25,125	.....	125	a8,491	454,978	6,832	17,528	2,499	b36,602	20,296	168
.....	.....	.....	181	43	12,380	684	983	.....	374	674	169
.....	15,712	232	.....	257	72,285	617	5,198	2,889	442	17,533	170
.....	4,000	.....	.....	336	67,002	1,446	10,049	59	1,312	7,365	171

* Including Fire Insurance, $11,500. † Local improvements, $5,000; floating debt, $10,000; Frazer Park, $11,850.
‡ Waterworks and Electric Light and Power development.
‖ Waterworks. ¶ Local improvements, bridge.
** Including contractors' deposits, $4,338 ‖‖ Including $4,587 fire insurance on Brown factory.
z^3 Including $7,000, A. Carnegie's donation to public library. a Including $7,036, sales of sundry materials.
§ Including $6,235, maintenance electric light and power supplied ratepayers.
b Including $32,886, maintenance of public utilities—gas, electric light and power.

STATISTICS OF ONTARIO VILLAGE AND TOWN

RECEIPTS, DISBURSEMENTS,

Villages and Towns.	Disbursements, 1907.—*Continued.*							
	Waterworks and electric light construction.	Buildings and other works.	Board of Health.	Support of the poor and other charities.	Administration of justice including police services.	County Treasurer for levies.	Payment on account of schools and education.	Sinking Fund investments and deposits.
	$	$	$	$	$	$	$	$
129. Lucknow	821	.....	6	55	94	760	2,027	674
130. Madoc	141	.....	15	178	106	848	2,548	.....
131. Markdale	.....	40	*602	10	125	312	2,047	.....
132. Markham	543	.....	8	2	24	.....	3,860	.....
133. Marmora	.....	400	10	66	76	455	.....	.....
134. Massey	11,911	.....	1	.....	277	.....	2,320	.....
135. Mattawa	.....	.....	22	.....	600	.....	4,772	.....
136. Maxville	.....	.....	26	.....	4	113	2,139	.....
137. Meaford	913	.....	2	189	523	1,015	10,000	.....
138. Merrickville	.....	1,283	15	.....	12	396	2,347	.....
139. Merritton	172	.....	.....	13	260	1,596	4,390	.....
140. Midland	12,098	.....	40	280	200	2,040	34,094	.....
141. Millbrook	.....	.....	78	17	12	395	2,032	.....
142. Milton	277	300	20	20	81	574	2,278	.....
143. Milverton	.....	.....	.....	33	33	219	1,579	.....
144. Mitchell	25	160	54	226	842	1,041	4,693	1,591
145. Morrisburg	4,269	.....	.....	264	38	962	4,747	.....
146. Mount Forest	3,468	.....	.....	24	441	1,329	5,281	4,378
147. Napanee	.....	1,037	210	890	.....	2,800	8,850	.....
148. Neustadt	.....	.....	.....	.....	.....	138	1,000	.....
149. Newboro	.....	.....	.....	2	6	132	923	.....
150. Newburgh	.....	.....	.....	50	1	425	1,525	.....
151. Newbury	.....	.....	3	4	12	184	705	.....
152. Newcastle	.....	.....	26	15	.....	386	1,500	.....
153. New Humburg	.....	.....	26	9	30	534	3,100	.....
154. New Liskeard	48,645	5,691	1,195	115	279	.....	5,244	.....
155. Newmarket	2,079	348	613	58	625	.....	6,980	.....
156. Niagara	.....	955	.....	75	424	810	2,270	.....
157. North Bay	6,701	3,355	259	155	1,811	.....	8,718	.....
158. North Toronto	7,307	6,811	199	242	450	807	10,078	2,509
159. Norwich	.....	.....	1	56	246	539	2,257	1,321
160. Norwood	.....	3,229	38	166	60	536	2,388	.....
161. Oakville	6,326	.....	4,796	419	510	1,663	4,860	953
162. Oil Springs	.....	.....	187	98	265	463	2,407	.....
163. Onemee	.....	.....	18	11	17	334	1,201	.....
164. Orangeville	458	.....	46	82	995	1,001	7,696	7,200
165. Orillia	29,049	46	135	319	2,249	3,519	16,231	378
166. Oshawa	20,342	7,000	129	695	2,096	2,461	12,466	.....
167. Ottawa East	.....	.....	201	.....	100	1,180	5,289	.....
168. Owen Sound	53,181	.....	1,209	1,479	6,068	5,075	33,414	62,388
169. Paisley	.....	145	242	5	326	470	1,595	.....
170. Palmerston	.....	.....	.....	60	380	.....	3,770	320
171. Paris	4,933	570	35	580	657	1,553	8,541	.....

* Smallpox epidemic.

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Disbursements, 1907.—*Continued.*								Assets, Dec. 31, '07		
Other investments and deposits.	School debentures redeemed.	All other debentures redeemed.	Refund of moneys borrowed for current expenses.	Interest on loans, advances and debentures.	Discount on debentures sold.	Miscellaneous.	Total disbursements.	Cash in treasury.	Taxes in arrears.	No.
$	$	$	$	$	$	$	$	$	$	
.....	.....	136	1,616	1,682	4	143	11,017	1,411	883	129
.....	582	946	7,609	975	.....	56	19,201	.....	4,867	130
.....	465	519	1,000	515	.....	224	10,621	1,078	457	131
500	125	820	2,288	858	20	31	22,403	273	913	132
.....	.....	497	2,026	168	.....	530	5,765	.....	1,765	133
.....	.....	.....	4,500	127	.....	225	20,322	122	1,694	134
.....	.....	926	1,827	1,361	.....	251	11,991	1,135	4,983	135
99	182	.....	3,200	348	.....	24	8,214	392	790	136
26,000	792	8,487	108,811	10,689	.....	409	178,905	3,936	2,113	137
.....	.....	277	4,683	539	.....	362	12,377	335	.....	138
1,574	572	2,749	570	2,114	.....	327	21,692	707	264	139
.....	823	6,535	23,865	13,826	.....	717	116,204	.....	5,825	140
84	367	.....	1,100	201	.....	84	6,601	238	750	141
382	.....	3,481	9,500	3,129	.....	250	37,150	3,452	.....	142
.....	.....	298	7,050	301	.....	124	11,754	.....	554	143
.....	.....	2,510	49,549	3,546	.....	614	81,739	377	570	144
.....	364	4,235	160,673	11,262	.....	2,092	195,028	15,421	1,170	145
2,356	5,175	4,193	100,500	8,420	.....	241	149,184	422	237	146
140	1,467	1,625	7,050	3,197	.....	826	47,128	.....	12,665	147
.....	.....	.....	400	4	.....	15	2,806	153	3	148
.....	198	210	.....	23	2	102	6,097	621	.....	149
.....	.....	.....	.....	.....	.....	99	3,477	552	1,004	150
.....	.....	309	.....	129	.....	97	2,555	514	38	151
.....	246	.....	500	21	.....	66	4,473	86	1,082	152
.....	253	1,774	2,252	1,231	.....	1,639	14,112	.....	1,715	153
6,458	333	1,170	6,619	4,242	2,583	1,973	105,768	476	6,872	154
.....	595	3,504	10,800	3,566	.....	560	41,257	555	6,514	155
.....	.....	2,826	14,150	1,949	.....	573	40,473	85	4,207	156
.....	844	5,510	166,390	10,344	.....	499	229,788	2,022	48,496	157
.....	90	1,987	28,415	6,137	277	96	103,947	1	9,388	158
6,087	517	3,996	3,006	1,701	.....	3,550	30,228	3,426	980	159
769	188	.....	6,750	323	.....	152	19,401	49	38	160
432	74	846	72,152	1,939	.....	1,744	118,474	.....	2,791	161
.....	195	1,100	3,658	1,288	.....	48	13,210	79	6,172	162
.....	98	103	1,375	363	.....	24	4,418	201	.....	163
.....	198	4,290	17,418	6,319	.....	1,083	57,135	1,358	2,706	164
.....	477	16,850	.....	18,668	.....	831	113,688	15,438	11,562	165
34	265	9,418	8,851	12,854	441	1,588	100,747	.....	6,892	166
.....	544	735	1,548	1,734	.....	3	19,201	.....	4,304	167
.....	1,949	9,383	92,373	40,474	625	3,379	394,754	60,224	70,268	168
.....	.....	1,069	1,500	1,015	.....	335	9,417	2,963	1,214	169
.....	.....	3,841	27,505	5,565	.....	3,751	71,871	414	568	170
.....	527	6,859	14,300	4,820	.....	1,134	64,740	2,262	160	171

STATISTICS OF ONTARIO VILLAGE AND TOWN

RECEIPTS, DISBURSEMENTS,

Villages and Towns.	Assets on December 31st, 1907.						Liabilities, Dec. 31	
	Sinking Fund investments and deposits.	All other investments and deposits.	Water works and electric light plant.	Other property.	Miscellaneous.	Total assets.	County levy.	Local school rates.
	$	$	$	$	$	$	$	$
129. Lucknow	13,151	1,000	10,000	7,300	10,885	44,630	62	
130. Madoc		*	15,000	5,700	1,048	26,615	848	
131. Markdale				5,800	8,011	15,346		814
132. Markham		4,407	11,000	3,500	†10,358	30,451	1,025	
133. Marmora				720	118	2,603	514	2,100
134. Massey			18,640	840	1,125	22,421		
135. Mattawa				10,723	1,458	18,299		5,064
136. Maxville		99		75		1,356		
137. Meaford		71,759	30,000	21,170	1,455	130,433		
138. Merrickville				10,470	28	10,833		
139. Merritton		1,574	77,500	13,410	53	93,508		
140. Midland			115,000	31,100		151,925	1,913	
141. Millbrook	421			6,900	327	8,636		202
142. Milton		10,060	39,135	8,800	180	61,627		
143. Milverton			200	2,000		2,754		
144. Mitchell	8,528		30,000	14,318	680	54,473	989	
145. Morrisburg			145,753	3,125	16,282	181,751		1,980
146. Mount Forest	18,930	33,914	48,000	9,000	23,544	134,047		
147. Napanee		140	45,000	30,850	1,625	90,280	3,200	9,100
148. Neustadt				500		656		
149. Newboro				1,750	270	2,641		
150. Newburgh				200	45	1,801		1,124
151. Newbury				2,760	21	3,333	229	
152. Newcastle				2,800	200	4,168		550
153. New Hamburg		2,300		17,200	140	21,355		
154. New Liskeard		6,458	60,000	14,663	1,500	89,969		4,000
155. Newmarket		40	45,540	19,412	1,867	73,928	1,216	
156. Niagara			49,000	35,350	4,054	92,696	840	
157. North Bay			107,266	30,456	65,790	254,030		12,212
158. North Toronto	25,467		70,662	9,873	39,260	154,651		
159. Norwich	6,245	6,087		3,600	4,642	24,980		1,390
160. Norwood		769		9,160	100	10,116		
161. Oakville	5,915	485	1,883	‡23,760	‖9,500	44,334		1,100
162. Oil Springs				5,050	66	11,367		
163. Omemee				1,400		1,601		
164. Orangeville	20,569	14,300	51,540	24,479	3,495	118,447	1,190	2,933
165. Orillia	2,855		361,000	104,500	2,809	498,164	3,483	3,800
166. Oshawa		45,072	130,000	31,480	45,598	259,042		
167. Ottawa East		500		7,800	2,772	15,376	634	
168. Owen Sound	205,034	46,000	325,141	116,000	69,033	891,700		34,844
169. Paisley		10,000		22,100		36,277		2,233
170. Palmerston	3,339	25,765	14,000	7,906	1,676	53,668	850	
171. Paris			129,211	42,800	29,000	203,423		

* Omitting $5,000 transferred to electric lighting.
† Including new bridge, $10,000,
‡ Including harbour, $10,000.
‖ Including swing-bridge, $9,000.

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907—*Continued.*

Liabilities on December 31st, 1907.									No.
Railway debentures.	School debentures.	Waterworks debentures.	Electric light debentures.	All other debentures.	Loans for current expenses and interest.	Due Sinking Fund.	Miscellaneous.	Total liabilities.	
$	$	$	$	$	$	$	$	$	
.....	.....	10,000	.....	14,721	.....	1,630	150	26,563	129
.....	603	.....	8,056	9,668	5,409	.....	.....	24,584	130
.....	1,649	.....	.....	9,065	3,589	.....	200	15,317	131
.....	6,076	5,582	288	5,577	3,365	.....	775	22,688	132
.....	.....	.....	.....	5,368	215	.....	603	8,800	133
.....	.....	.....	.....	.....	10,703	.....	†7,501	18,204	134
.....	.....	.....	.....	22,718	2,000	.....	.....	29,782	135
.....	4,475	.....	.....	3,528	500	.....	.....	8,503	136
29,977	2,622	24,375	.....	108,901	22,459	.....	12,481	200,815	137
.....	.....	.....	.....	6,588	.....	.....	.....	6,588	138
.....	4,051	34,504	.....	.....	.....	.....	.....	38,555	139
.....	18,242	64,846	26,037	171,703	30,653	.....	3,198	316,592	140
.....	1,224	.....	.....	2,270	.....	.....	350	4,046	141
.....	.....	12,453	7,185	43,183	.....	.....	50	62,871	142
.....	.....	.....	.....	3,283	631	.....	.....	3,914	143
.....	.....	15,346	.....	50,772	5,660	1,300	466	74,533	144
.....	382	12,294	102,106	18,431	.....	.....	*38,488	173,681	145
.....	756	28,961	10,581	115,735	.....	.....	.....	156,033	146
.....	4,180	.....	.....	61,017	13,071	.....	1,993	92,561	147
.....	.....	.....	.....	.....	225	.....	50	275	148
.....	.....	.....	.....	4,000	.....	.....	.....	4,000	149
.....	.....	.....	.....	.....	.....	.....	108	1,232	150
.....	.....	.....	.....	3,100	305	.....	41	3,675	151
.....	.....	.....	.....	.....	.....	.....	.....	550	152
.....	4,378	.....	.....	16,916	4,517	.....	1,070	26,881	153
.....	9,047	59,097	.....	7,237	16,553	.....	18,363	114,297	154
.....	10,340	18,461	12,818	19,007	7,647	.....	717	70,206	155
.....	.....	18,356	4,864	9,965	17,011	.....	1,419	52,455	156
.....	19,041	61,711	.....	46,911	96,493	.....	9,292	245,660	157
.....	21,410	53,817	.....	44,111	55,023	.....	.....	174,361	158
.....	5,071	.....	.....	22,505	3,500	.....	1,087	33,553	159
.....	3,865	.....	.....	.....	6,178	.....	144	10,187	160
.....	3,215	.....	.....	22,327	27,222	576	1,450	55,890	161
.....	7,437	.....	.....	18,612	2,000	.....	.....	28,049	162
.....	5,218	.....	.....	1,697	.....	.....	.....	6,915	163
24,699	1,388	33,593	.....	70,555	2,335	.....	794	137,487	164
.....	15,517	29,441	272,555	101,864	.....	.....	1,815	428,475	165
.....	11,435	145,402	.....	143,870	12,464	.....	4,836	318,007	166
.....	10,379	.....	.....	26,885	4,421	.....	521	42,840	167
106,437	30,725	131,549	100,000	401,058	145,769	18,380	578	969,340	168
.....	.....	.....	.....	19,300	.....	.....	226	21,759	169
.....	10,670	.....	12,064	105,171	.....	.....	6,884	135,639	170
.....	1,711	45,242	24,611	30,066	5,000	.....	2,100	108,730	171

† Including $6,452 waterworks contract account, and $751 school debentures payable to Salter, May etc.

* Including $35,400 due on power contract, etc.

STATISTICS OF ONTARIO VILLAGE AND TOWN

RECEIPTS, DISBURSEMENTS.

Village and Town Municipalities and Counties in which located.	Receipts, 1907.							
	Balance from 1906.	Municipal and School taxes.	Licenses.	Fees, rents, fines, etc.	Water, electric light and gas rates.	Interest and dividends.	Refund of money invested.	Borrowed for current expenses.
	$	$	$	$	$	$	$	$
172. Parkhill, Middlesex	282	10,779	282	258	.....	389	2,166	.....
173. Parry Sound, Parry Sound	271	30,834	1,499	1,356	12,463	846	13,731	42,242
174. Pembroke, Renfrew	.....	42,457	3,235	1,528	9,682	195	.....	16,563
175. Penetanguishene, Simcoe	837	26,836	823	116	3,867	.....	500	56,901
176. Perth, Lanark	7,617	33,224	1,516	875	3,058	32	400	6,464
177. Petrolia, Lambton	6,884	37,661	1,178	1,325	15,706	.....	.....	5,688
178. Picton, Prince Edward	1,299	29,986	1,463	1,047	14,405	27	1,175	.....
179. Point Edward, Lambton	469	4,210	338	7	.....	.....	.....	1,200
180. Port Carling, Muskoka	1,056	1,994	31	31	.....	.....	.....	.....
181. Port Colborne, Welland	.....	8,027	628	36	1,922	2	889	.....
182. Port Dalhousie, Lincoln	3,050	7,209	331	1,157	.....	.....	.....	.....
183. Port Dover, Norfolk	1,402	7,927	331	569	.....	31	.....	2,500
184. Port Elgin, Bruce	13,009	10,036	263	365	1,000	.....	757	17,707
185. Port Hope, Durham	.....	51,721	1,788	551	6,701	1,206	229	75,520
186. Port Perry, Ontario	880	13,107	321	471	3,585	.....	.....	17,600
187. Port Rowan, Norfolk	582	3,705	257	15	.....	4	.....	3,842
188. Portsmouth, Frontenac	357	1,896	125	8	.....	.....	.....	.....
189. Port Stanley, Elgin	237	2,440	302	80	.....	.....	.....	2,355
190. Powassan, Parry Sound	552	2,568	220	128	.....	.....	.....	1,200
191. Prescott, Grenville	103	28,439	1,378	1,735	14,944	.....	1,769	35,438
192. Preston, Waterloo	.....	18,365	1,204	318	10,412	634	2,210	85,271
193. Rainy River, Rainy River	703	13,960	931	48	.....	.....	.....	9,000
194. Renfrew, Renfrew	.....	29,211	1,406	1,489	11,130	.....	.....	62,178
195. Richmond, Carleton	.....	2,165	100	123	.....	46	100	423
196. Richmond Hill, York	3	3,200	.....	237	.....	.....	.....	350
197. Ridgetown, Kent	.....	18,552	592	718	.....	5	.....	17,308
198. Rockland, Russell	1,045	6,227	738	5	.....	.....	.....	500
199. St. Marys, Perth	4,686	36,634	1,310	434	11,827	35	.....	54,989
200. Sandwich, Essex	214	16,210	1,503	498	2,449	.....	.....	1,593
201. Sarnia, Lambton	377	113,932	3,175	2,745	22,968	5,534	2,298	333,183
202. Sault Ste. Marie, Algoma	11,568	92,812	2,510	2,949	.....	13,275	35,842	64,961
203. Seaforth, Huron	894	20,779	919	557	1,099	2,472	2,115	34,850
204. Shelburne, Dufferin	909	8,165	317	494	1,335	.....	.....	2,800
205. Simcoe, Norfolk	.....	28,324	1,138	418	.....	1,386	274	.....
206 Smith's Falls, Lanark	.....	51,165	1,989	1,329	15,159	4,753	12,207	133,939
207. Southampton, Bruce	3,088	12,563	25	167	1,453	102	.....	1,977
208. South River, Parry Sound	.....	1,756	94	124	.....	.....	.....	.....
209. Springfield, Elgin	146	3,278	94	92	.....	17	.....	319
210. Stayner, Simcoe	60	6,977	435	.....	1,015	30	1,500	795
211. Steelton, Algoma	8,997	21,353	54	229	.....	*4,365	.....	5,000
212. Stirling, Hastings	2,039	5,024	238	291	.....	.....	.....	1,400
213. Stouffville, York	240	6,298	143	1	525	25	.....	.....
214. Strathroy, Middlesex	.....	27,043	807	223	10,880	19	102	34,862

* Accrued on unsold Debentures.

MUNICIPALITIES, FOR THE YEAR 1907. —*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Receipts, 1907.—*Continued.*						Disbursements, 1907.					
Borrowed on debentures for schools.	Borrowed on debentures for other purposes.	Premiums on debentures sold.	County Grants.	Miscellaneous.	Total receipts.	Allowances, salaries and commissions.	Lighting of streets, water supply and fire protection.	Law costs.	Other expenses of municipal government.	Streets, bridges and parks.	No.
$	$	$	$	$	$	$	$	$	$	$	
.....	.....	.....	....	69	14,225	315	2,417	16	407	289	172
.....	15,593	.....	....	2,205	121,040	2,364	8,934	520	1,038	7,804	173
9,000	6,925	.....	63	931	90,579	2,089	14,519	225	1,015	10,627	174
.....	.....	.....	502	383	90,768	1,072	3,614	67	1,315	3,521	175
3,000	74,040	373	....	857	131,456	1,282	3,023	.....	1,396	11,307	176
2,000	.....	.....	....	518	70,960	3,219	14,621	336	1,801	3,439	177
15,000	.....	.....	....	419	64,821	1,898	11,634	1,154	591	8,652	178
.....	1,149	.....	....	72	7,445	304	455	25	235	1,309	179
.....	.....	.....	....	101	3,213	208	.....	.....	87	548	180
.....	.....	.....	....	158	11,662	794	823	21	233	1,857	181
.....	4,000	.....	....	17	15,764	276	1,800	45	121	4,444	182
.....	.....	.....	....	49	12,809	311	544	.....	394	2,180	183
.....	‡30,000	.....	200	668	74,005	365	2,531	73	376	441	184
.....	.....	.....	....	3,269	140,985	4,179	6,975	486	1,198	5,698	185
.....	.....	.....	....	134	36,098	685	3,659	.....	290	1,713	186
.....	2,645	.....	....	2	11,052	206	306	.....	166	2,604	187
.....	.....	.....	....	110	2,496	284	27	.....	84	440	188
.....	.....	.....	....	55	5,469	347	652	74	167	1,064	189
.....	.....	.....	....	1,327	5,995	148	.....	3	101	342	190
.....	21,555	.....	....	361	105,812	2,887	13,534	185	1,450	8,373	191
.....	‖72,400	104	....	2,164	193,082	984	7,195	279	1,087	8,173	192
.....	.....	.....	....	52	21,694	1,474	821	123	439	2,936	193
.....	.....	.....	....	419	105,833	1,198	11,875	.....	698	12,810	194
.....	.....	.....	....	51	3,008	162	.....	.....	191	617	195
.....	1,000	100	....	122	5,012	176	365	25	210	1,333	196
.....	.....	.....	....	157	37,332	710	3,091	81	861	4,154	197
.....	.....	.....	....	160	8,675	424	509	38	164	1,432	198
.....	¶23,636	.....	....	1,412	134,963	1,215	13,193	41	1,149	3,817	199
.....	.....	.....	....	263	22,730	1,064	3,952	255	569	2,826	200
.....	§160,126	.....	....	1,203	645,541	3,829	24,192	362	3,540	23,514	201
*5,000	17,453	.....	....	†16,142	262,515	6,991	15,631	998	7,247	45,191	202
.....	$x^2$59,400	.....	....	104	123,189	1,120	3,068	.....	1,004	27,923	203
.....	.....	.....	....	596	14,616	413	1,617	.....	510	411	204
.....	‡63.300	.....	....	267	95,107	905	4,859	26	1,156	1,984	205
.....	$x^3$150,000	.....	....	1,163	371,704	1,849	18,629	772	1,261	3,569	206
.....	16,233	119	100	835	36,662	634	1,802	145	593	3,403	207
.....	.....	.....	.....	.....	1,974	131	.....	8	81	116	208
.....	5,000	.....	150	20	9,116	158	35	.....	218	1,301	209
.....	.....	.....	1	140	10,953	501	988	70	182	592	210
.....	1,745	.....	....	2,801	44,544	1,930	.....	416	1,280	650	211
2,000	.....	.....	....	343	11,335	277	20	3	212	609	212
.....	.....	.....	....	230	7,468	228	722	75	132	1,304	213
.....	.....	.....	447	604	74,987	986	3,591	17	8,258	3,168	214

* Unsold but hypothecated to Bank.

† Including $15,045, Fire Insurance.

‡ Waterworks. ‖ Including Waterworks $57,000, bonus $10,000.

¶ Including $13,972 for electric light plant. § Including $133,126 for Local Improvements, $10,000 for waterworks, and $12,000 for bonus.

x^2 Comprising $29,400 Local Improvements and $30,000 bonus.

x^3 Loan to Frost & Wood.

STATISTICS OF ONTARIO VILLAGE AND TOWN

RECEIPTS, DISBURSEMENTS

Villages and Towns.	Disbursements, 1907.—*Continued.*							
	Waterworks and electric light construction.	Buildings and other works.	Board of Health.	Support of the poor and other charities.	Administration of justice, including police services.	County Treasurer for levies.	Payment on account of schools and education.	Sinking Fund investments and deposits.
	$	$	$	$	$	$	$	$
172. Parkhill	.....	91	178	42	233	628	2,470	2,133
173. Parry Sound	18,702	1,087	794	788	712	.....	6,500	.....
174. Pembroke	921	500	389	147	1,550	2,671	22,380	848
175. Penetanguishene	1,399	670	65	333	694	1,190	*46,622	1,005
176. Perth	2,017	.....	120	95	1,027	3,224	13,002	.....
177. Petrolia	659	254	737	567	799	2,224	19,100	.....
178. Picton	4,310	.....	70	302	1,007	2,700	21,144	.....
179. Point Edward	.....	.....	1	118	140	351	1,550	.....
180. Port Carling	.....	.....	38	10	28	.....	582	.....
181. Port Colborne	.....	.....	10	65	111	513	2,700	.....
182. Port Dalhousie	.....	173	10	5	571	870	2,345	149
183. Port Dover	.....	486	28	88	140	567	2,600	.....
184. Port Elgin	22,877	.....	157	8	169	576	3,000	.....
185. Port Hope	5,092	329	50	496	693	2,061	10,600	1,107
186. Port Perry	.....	.....	.....	130	150	898	4,192	.....
187. Port Rowan	.....	.....	.....	37	.....	326	1,662	.....
188. Portsmouth	.....	.....	3	.....	90	.....	1,041	.....
189. Port Stanley	.....	.....	90	5	51	588	1,207	.....
190. Powassan	.....	1,717	22	32	.....	.....	1,482	.....
191. Prescott	2,040	.....	76	244	575	.....	8,843	.....
192. Preston	48,449	1,435	367	26	560	1,116	6,013	.....
193. Rainy River	.....	.....	4	113	219	.....	4,996	.....
194. Renfrew	2,751	610	633	432	735	1,722	11,215	.....
195. Richmond	.....	30	19	.....	24	233	818	299
196. Richmond Hill	.....	99	9	54	9	318	1,333	.....
197. Ridgetown	.....	475	10	252	769	927	5,906	.....
198. Rockland	.....	40	28	10	48	358	3,713	.....
199. St. Marys	3,244	.....	191	897	1,539	.....	8,000	.....
200. Sandwich	725	.....	276	380	187	1,154	3,202	.....
201. Sarnia	31,831	1,200	450	1,634	5,087	5,532	27,755	1,455
202. Sault Ste. Marie	.....	14,050	1,175	1,453	5,803	.....	48,887	10,350
203. Seaforth	.....	.....	30	80	512	1,125	5,651	6,303
204. Shelburne	.....	.....	117	11	409	429	3,570	.....
205. Simcoe	60,674	.....	99	65	1,122	1,843	7,893	.....
206. Smith's Falls	5,059	3,220	896	409	1,475	.....	12,266	.....
207. Southampton	5,457	.....	795	19	244	.....	4,400	.....
208. South River	.....	.....	14	.....	90	.....	950	.....
209. Springfield	.....	77	32	.....	29	170	824	143
210. Stayner	.....	.....	41	49	12	.....	4,213	.....
211. Steelton	2,364	4,061	1,013	186	750	.....	6,661	.....
212. Stirling	.....	.....	10	252	.....	630	4,106	.....
213. Stouffville	.....	16	20	18	9	603	1,481	.....
214. Strathroy	928	.....	618	159	550	2,936	7,600	.....

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Disbursements, 1907.—*Continued.*								Assets on Dec. 31.		
Other investments and deposits.	School debentures redeemed.	All other debentures redeemed.	Refund of moneys borrowed for current expenses.	Interest on loans, advances and debentures.	Discount on debentures sold.	Miscellaneous.	Total disbursements.	Cash in treasury.	Taxes in arrears.	No.
$	$	$	$	$	$	$	$	$	$	
.....	.....	1,700	.....	1,408	.....	78	12,405	1,820	871	172
13,678	670	5,259	41,803	8,067	357	1,781	120,858	182	26,267	173
.....	776	9,947	12,926	7,767	270	1,012	90,579	.....	42,545	174
.....	255	1,474	21,885	4,902	.....	609	90,692	76	5,120	175
.....	810	6,959	71,212	7,973	1,855	1,382	126,684	4,772	1,261	176
.....	585	12,180	.....	9,755	.....	684	70,960	.....	10,780	177
190	559	3,802	309	2,758	563	1,004	62,647	2,174	646	178
.....	.....	1,329	400	604	.....	27	6,848	597	1,523	179
.....	112	67	.....	231	.....	138	2,049	1,164	173	180
.....	198	1,908	320	1,488	.....	100	11,141	521	59	181
.....	.....	1,060	.....	771	.....	9	12,649	3,115	296	182
.....	249	989	2,500	446	.....	206	11,728	1,081	1,194	183
.....	561	2,511	30,992	3,831	1,680	1,880	72,028	1,977	1,327	184
2,000	257	2,273	83,100	12,395	.....	1,396	140,985	.....	13,777	185
587	.....	2,260	18,645	1,585	.....	282	35,026	1,072	1,695	186
.....	.....	100	4,962	226	.....	457	11,052	.....	296	187
.....	.....	.....	.....	.....	.....	1	1,970	526	1,578	188
.....	.....	.....	975	65	.....	57	5,342	127	1,952	189
.....	.....	86	900	135	.....	248	5,216	779	328	190
20,962	779	4,526	32,030	8,190	.....	1,118	105,812	.....	15,818	191
67,000	796	5,900	33,559	9,524	.....	619	193,082	.....	4,243	192
.....	415	1,534	9,000	2,225	.....	115	24,414	280	9,552	193
.....	180	6,087	46,238	7,448	.....	1,201	105,833	.....	8,708	194
6	30	175	.....	326	.....	78	3,008	.....	1,178	195
.....	74	.....	350	128	.....	245	4,728	284	.....	196
.....	362	2,866	13,309	3,401	.....	158	37,332	.....	1,735	197
.....	132	.....	500	309	.....	5	7,710	965	9,327	198
10,000	95	8,206	73,489	5,206	133	3,111	133,526	1,437	4,449	199
.....	.....	2,099	4,000	2,016	.....	25	22,730	.....	4,593	200
8,173	4,092	39,210	403,320	36,317	2,342	*21,336	645,171	370	63,000	201
22,453	.....	5,254	28,146	30,899	.....	†13,451	257,979	4,536	54,646	202
30,000	.....	.....	37,367	5,501	212	985	120,881	2,308	1,703	203
.....	199	886	2,800	1,192	.....	1,463	14,027	589	342	204
.....	492	2,623	720	2,920	3,861	1,372	92,614	2,493	1,281	205
150,000	887	22,010	119,685	22,201	.....	7,516	371,704	.....	2,872	206
.....	253	1,970	8,277	3,476	.....	918	32,386	4,276	4,832	207
.....	.....	.....	.....	9	.....	28	1,433	541	264	208
.....	.....	514	5,121	346	100	48	9,116	.....	98	209
.....	177	1,105	795	1,292	.....	213	10,230	723	197	210
.....	676	1,745	10,341	8,205	.....	2,753	43,031	1,513	10,349	211
.....	.....	301	1,400	579	.....	262	8,661	2,674	380	212
.....	.....	1,143	.....	1,112	.....	285	7,148	320	640	213
264	.....	5,586	35,791	4,143	.....	392	74,987	.....	354	214

* Including $14,000 for grant of land to Standard Chair Co.
† Including $10,266 balance in hands of ex-treasurer.

STATISTICS OF ONTARIO VILLAGE AND TOWN

RECEIPTS, DISBURSEMENTS,

Villages and Towns.	Assets on December 31, 1907.—*Continued*.						Liabilities Dec. 31	
	Sinking Fund investments and deposits.	All other investments and deposits.	Water works and electric light plant.	Other property.	Miscellaneous.	Total assets.	County levy.	Local school rates.
	$	$	$	$	$	$	$	$
172. Parkhill	9,951			12,400		25,042	1,126	1,690
173. Parry Sound			122,776	10,000	9,560	168,785		1,799
174. Pembroke	7,674		80,000	33,700	21,300	185,219	2,852	16,839
175. Penetangu'ene	5,485	3,500	47,676	25,970	10,576	98,403	1,181	4,295
176. Perth		24,100	13,000	42,800	1,736	87,669		5,207
177. Petrolia			190,259	57,700	3,986	262,725		10,100
178. Picton		399	60,000	18,710	1,195	83,124		2,800
179. Point Edward				2,450		4,570	388	1,335
180. Port Carling				2,750	901	4,988		402
181. Port Colborne		7,447	23,225	1,875	16,400	49,527		
182. Port Dalhousie	149	6,500		1,100		11,160		1,906
183. Port Dover				17,300		19,575		1,400
184. Port Elgin		12,243	39,000	7,500	145	62,192		
185. Port Hope	13,013	21,775	82,154	192,045	11,228	333,992		
186. Port Perry		587	22,000	13,800	100	39,254		17
187. Port Rowan			150	10	394	850		
188. Portsmouth				3,110		5,214	575	739
189. Port Stanley			250	1,570		3,899		14
190. Powassan				4,240		5,347		511
191. Prescott		20,962	118,000	56,575	6,178	217,533		
192. Preston		78,569	104,864	29,448	18,463	235,587		
193. Rainy River				6,563	7,878	24,273		3,121
194. Renfrew		30,472	105,911	21,900	40,449	207,440		
195. Richmond	1,762	6		2,750	371	6,067	232	538
196. Richmond Hill				4,308	100	4,692		
197. Ridgetown				27,610		29,345		
198. Rockland				700		10,992	535	7,138
199. St. Marys		10,000	85,000	26,000	15,843	142,729		
200. Sandwich				29,610	868	35 071		3,359
201. Sarnia	27,146	19,005	225,000	61,700	370,419	766,640		
202. S. Ste. Marie	40,529	261,382		38,026	12,379	411,498		11,703
203. Seaforth	33,522	49,491	13,000	20,500	60	120,584		
204. Shelburne			17,900	13,450	8,752	41,033	510	130
205. Simcoe		1,887	63,300	26,600		95,561		
206. Smith's Falls		137,793	330,000	70,804	31,460	572,929		
207. Southampton		10,000	32,297	7,450	777	59,632	630	
208. South River				528	150	1,483		458
209. Springfield	143		75	2,760	32	3,108	250	
210. Stayner			24,000	2,240	11,028	38,188	540	
211. Steelton			26,099	10,805	201	48,967		
212. Stirling				6,397		9,451	24	1,897
213. Stouffville			25,000	4,500	156	30,616		
214. Stratford		264	61,099	12,000	9,436	83,153		

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Liabilities on December 31, 1907.—*Continued.*

Railway debentures.	School debentures.	Water works debentures.	Electric light debentures.	All other debentures.	Loans for current expenses and interest.	Due Sinking Fund.	Miscellaneous.	Total liabilities.	No.
$	$	$	$	$	$	$	$	$	
.....	8,000	.....	.....	15,499	.....	.....	337	26,652	172
17,209	7,346	40,385	41,186	25,207	42,242	.....	1,500	176,874	173
20,000	16,522	64,555	.....	64,615	24,563	.....	1,404	211,350	174
.....	2,793	28,305	.....	44,687	48,181	885	6,125	136,452	175
.....	3,606	.....	11,100	145,713	6,464	.....	299	172,383	176
.....	19,596	125,919	.....	73,926	5,688	.....	1,126	236,355	177
.....	17,941	16,210	20,750	.....	840	.....	657	59,198	178
.....	.....	.....	.....	14,757	1,584	.....	132	18,196	179
.....	2,628	.....	.....	1,809	.....	.....	464	5,303	180
.....	1,619	12,575	.....	19,106	.....	.....	.....	33,300	181
.....	.....	.....	.....	16,485	.....	.....	.....	18,391	182
.....	263	.....	.....	7,200	.....	.....	.....	8,863	183
.....	1,135	29,508	.....	33,718	11,050	.....	64	75,475	184
.....	7,605	42,522	.....	185,717	20,380	.....	200	256,424	185
.....	.....	14,788	.....	21,337	11,203	.....	45	47,390	186
.....	.....	.....	.....	4,068	880	.....	426	5,374	187
.....	.....	.....	.....	.....	.....	.....	30	1,344	188
.....	.....	.....	.....	.....	1,380	.....	56	1,450	189
.....	.....	.....	.....	1,914	300	.....	1,195	3,920	190
.....	14,325	90,304	18,822	48,754	19,431	.....	.....	191,636	191
.....	3,907	56,066	24,170	65,567	85,271	.....	2,109	237,090	192
.....	23,814	.....	.....	16,239	.....	.....	5,527	48,701	193
9,364	5,323	57,929	24,170	52,643	62,178	.....	.....	211,607	194
.....	2,970	.....	.....	3,006	423	.....	85	7,254	195
.....	2,395	.....	.....	1,000	.....	.....	.....	3,395	196
8,440	1,511	.....	.....	51,589	5,308	.....	.....	66,848	197
.....	5,742	.....	.....	.....	.....	.....	1,410	14,825	198
.....	2,143	39,599	21,449	33,027	10,000	.....	570	109,788	199
.....	.....	12,701	.....	21,381	1,593	.....	523	39,557	200
.....	53,246	115,664	.....	479,718	65,507	.....	16,228	730,363	201
.....	76,187	.....	.....	579,007	64,964	.....	23,569	755,430	202
.....	.....	3,500	8,500	133,317	26,400	2,100	1,683	175,500	203
.....	7,104	10,815	.....	7,060	500	.....	71	26,190	204
.....	10,997	63,300	.....	55,313	.....	.....	978	130,588	205
.....	11,802	175,604	.....	301,157	42,187	1,126	1,518	533,394	206
.....	5,920	31,699	.....	39,226	.....	.....	.....	77,475	207
.....	.....	.....	.....	.....	.....	.....	621	1,079	208
.....	.....	.....	.....	5,275	.....	.....	19	5,544	209
.....	1,497	20,305	.....	8,696	.....	.....	105	31,143	210
.....	19,498	.....	.....	.....	4,659	.....	*22,059	46,216	211
.....	2,000	.....	.....	11,748	.....	.....	215	15,884	212
.....	.....	19,649	.....	7,023	.....	.....	114	26,786	213
.....	.....	54,414	.....	26,843	562	.....	925	82,744	214

* Water works construction account, etc.

STATISTICS OF ONTARIO VILLAGE AND TOWN

RECEIPTS, DISBURSEMENTS,

Village and Town Municipalities and Counties in which located.	Receipts, 1907. Balance from 1906.	Municipal and school taxes.	Licenses.	Fees, rents, fines, etc.	Water, electric light, and gas rates.	Interest and dividends.	Refund of money invested.	Borrowed for current expenses.
	$	$	$	$	$	$	$	$
215. Streetsville, Peel	858	4,080	188	15	.....	65	.....	9,297
216. Sturgeon Falls, Nipissing	420	24,300	600	659	3,853	....	.....	26,357
217. Sturgeon Point, Victoria	30	710	5	16	.....	.....	.....	.....
218. Sudbury, Sudbury	.....	31,957	433	579	21,963	92	508	29,539
219. Sundridge, Parry Sound	956	1,680	92	52	.....	.....	*5,100	.....
220. Sutton, York	743	3,335	238	124	.....	.....	.....	650
221. Tara, Bruce	1,659	4,063	.....	.....	.....	20	.....	.....
222. Teeswater, Bruce	1,206	5,984	319	149	.....	671	396	.....
223. Thamesville, Kent	805	5,816	.....	76	2,748	.....	451	5,000
224. Thedford, Lambton	266	3,137	208	50	.....	.....	.....	1,650
225. Thessalon, Algoma	837	8,223	477	197	4,994	28	.....	6,900
226. Thornbury, Grey	54	6,561	.....	83	.....	95	105	4,050
227. Thorold, Welland	709	21,003	727	45	4,483	.....	.....	40,800
228. Tilbury, Kent	27	9,626	701	7	898	41	1,762	20,515
229. Tillsonburg, Oxford	6,334	25,684	835	660	.....	2,134	853	7,000
230. Tiverton, Bruce	467	1,499	88	28	.....	.....	.....	.....
231. Tottenham, Simcoe	145	4,638	150	108	1,680	.....	.....	700
232. Trenton, Hastings	.....	32,951	1,523	1,069	1,650	131	4,526	47,418
233. Tweed, Hastings	1,774	7,521	477	48	.....	.....	.....	6,550
234. Uxbridge, Ontario	1,219	14,270	449	1,282	.....	125	.....	22,000
235. Vankleek Hill, Prescott	1,934	5,966	519	224	.....	31	.....	150
236. Vienna, Elgin	178	1,793	94	68	.....	50	.....	500
237. Walkerton, Bruce	397	21,991	1,113	431	3,180	116	90	17,420
238. Walkerville, Essex	....	57,654	1,177	177	.....	1	.....	38,000
239. Wallaceburg, Kent	5,433	28,208	1,210	280	.....	15	7,256	362
240. Wardsville, Middlesex	146	1,318	94	47	.....	.....	.....	.....
241. Waterdown, Wentworth	26	2,882	268	.....	.....	.....	.....	.....
242. Waterford, Norfolk	.....	6,954	.....	20	.....	.....	.....	3,802
243. Waterloo, Waterloo	373	40,468	1,650	592	16,820	1,198	4,628	21,778
244. Watford, Lambton	1,751	9,132	372	60	.....	.....	750	11,050
245. Webbwood, Sudbury	1,897	3,605	340	452	.....	.....	.....	.....
246. Welland, Welland	115	36,094	1,233	193	4,794	1,462	14,676	50,543
247. Wellington, Prince Edward	280	3,536	188	.....	.....	2	.....	1,202
248. Weston, York	482	11,608	.....	65	2,180	2	.....	12,992
249. Westport, Leeds	383	3,378	328	59	.....	.....	.....	.....
250. Whitby, Ontario	1,822	24,603	793	439	6,866	.....	.....	73,333
251. Wiarton, Bruce	271	21,753	902	488	4,442	734	.....	104,841
252. Winchester, Dundas	99	9,106	30	100	409	.....	.....	4,450
253. Wingham, Huron	1,855	23,610	995	557	9,455	694	798	10,772
254. Woodbridge, York	1,108	3,053	194	.....	.....	35	.....	800
255. Woodville, Victoria	67	3,027	125	69	.....	.....	.....	1,104
256. Wroxeter, Huron	535	2,133	109	41	.....	.....	.....	400
257. Wyoming, Lambton	1	3,137	229	10	.....	.....	.....	7,100

* Including $4,490 withdrawn from Woollen Mills loan security, written off.

MUNICIPALITIES FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Receipts, 1907.—*Continued.*						Disbursements, 1907.					
Borrowed on debentures for schools.	Borrowed on debentures for other purposes.	Premiums on debentures sold.	County grants.	Miscellaneous.	Total receipts.	Allowances, salaries and commissions.	Lighting of streets, water supply and fire protection.	Law costs.	Other expenses of municipal government.	Streets, bridges and parks.	No.
$	$	$	$	$	$	$	$	$	$	$	
.....	1,435	.....	....	79	16,017	346	150	32	206	1,041	215
.....	.....	.....	....	2,057	58,246	1,271	2,690	354	824	5,270	216
.....	.....	.....	....	.....	761	53	.....	65	68	221	217
.....	.....	.....	....	1,756	86,827	1,315	7,316	210	*9,356	7,415	218
.....	.....	.....	....	35	7,915	155	49	150	85	30	219
.....	.....	.....	....	52	5,142	162	146	71	159	1,409	220
.....	.....	.....	....	99	5,841	184	355	.....	119	232	221
.....	.....	.....	....	1	8,726	466	532	88	178	1,082	222
.....	.....	.....	....	105	15,001	409	3,660	.....	338	759	223
.....	.....	.....	....	.....	5,311	100	90	.....	146	1,191	224
.....	10,500	.....	....	831	32,987	1,816	3,327	164	887	950	225
.....	5,000	.....	....	45	15,993	372	349	10	298	6,133	226
.....	.....	.....	....	†5,373	73,140	765	4,322	891	905	2,304	227
2,000	.....	20	...	295	35,922	376	1,516	46	633	5,165	228
.....	.....	.....	....	781	44,281	891	2,420	57	924	5,054	229
.....	.....	.....	100	63	2,245	137	.....	.....	117	486	230
.....	.....	.....	....	19	7,440	244	2,178	8	270	907	231
.....	‡24,554	.....	....	316	114,138	1,104	2,133	172	778	2,706	232
.....	.....	.....	....	83	16,453	342	1,237	2	133	6,098	233
.....	8,000	.....	....	243	47,588	808	1,738	60	558	4,265	234
.....	.....	.....	....	216	9,040	373	451	6	158	2,143	235
.....	.....	.....	....	.....	2,683	106	.....	.....	101	575	236
.....	.....	.....	100	578	45,416	1,007	2,745	.....	828	1,924	237
.....	.....	.....	....	296	97,305	1,947	6,392	300	2,223	45,878	238
.....	.....	.....	200	.....	42,964	804	3,167	50	705	2,250	239
.....	.....	.....	13	25	1,643	41	.....	.....	57	264	140
.....	.....	.....	....	87	3,263	128	25	205	101	1,015	241
.....	.....	.....	....	220	10,996	345	.....	1,025	239	3,044	242
.....	‖37,737	1,655	....	425	127,324	1,430	20,105	385	1,284	9,269	243
.....	.....	.....	....	111	23,226	468	1,277	16	299	1,755	244
2,408	.....	.....	....	53	8,755	507	.....	11	45	357	245
.....	11,000	.....	....	71	123,181	2,394	5,352	556	1,501	11,199	246
.....	1,000	.....	100	34	6,342	180	852	44	73	1,956	247
.....	.....	.....	150	339	27,818	1,722	2,044	489	491	11,986	248
.....	.....	.....	....	49	4,197	399	105	9	80	1,233	249
.....	.....	.....	....	155	108,011	1,042	6,112	150	1,126	5,044	250
.....	.....	.....	200	140	133,771	774	3,329	69	648	1,505	251
.....	.....	.....	....	.....	14,194	159	873	22	341	2,296	252
1,500	3,160	....	....	716	54,142	933	6,635	129	1,177	1,611	253
.....	.....	.....	....	237	5,427	279	52	.....	141	1,185	254
.....	.....	.....	....	81	4,473	124	20	31	218	592	255
.....	.....	.....	....	278	3,496	240	249	65	136	90	256
.....	6,573	.....	....	145	17,195	280	200	29	114	6,582	257

* Including $8,114 maintenance, electric power.
† Including $4,200 contractors' deposits.
‡ Consolidated—Town Debenture Act, 1906.
‖ Including $10,737 local improvement, and $23,000 sewage disposal farm.

STATISTICS OF ONTARIO VILLAGE AND TOWN

RECEIPTS, DSBURSEMENTS.

Villages and Towns.	Disbursements, 1907.—*Continued.*							
	Water works and electric light construction.	Buildings and other works.	Board of Health.	Support of the poor and other charities.	Administration of justice, including police service.	County Treasurer for levies.	Payment on account of schools and education.	Sinking Fund investments and deposits.
	$	$	$	$	$	$	$	$
215. Streetsville	8,580		20		55	228	1,333	
216. Sturgeon Falls	5,632	94	157	32	745		7,163	
217. Sturgeon Point			125		30	42	60	
218. Sudbury	11,925	3,038	709	753	1,440		9,776	
219. Sundridge							753	
220. Sutton		381	135	44	6	287	1,398	
221. Tara		246	20	5	42	314	1,288	
222. Teeswater					54	450	2,000	2,318
223. Thamesville	92		25	27	136	219	2,267	
224. Thedford			20		20	196	981	
225. Thessalon	1,530		25	70	28		2,579	128
226. Thornbury		289		5	100	290	2,099	129
227. Thorold	31,563		91	9	860	939	6,238	
228. Tilbury	1,763			33	468	197	4,859	
229. Tillsonburg	1,816	600	29	97	551	1,545	6,658	5,420
230 Tiverton			10	18	22	178	827	
231. Tottenham		50	10		50	371	600	
232. Trenton		1,213	100	525	3,339		10,401	1,538
233. Tweed		200	130	146	204	724	2,668	
234. Uxbridge	8,000	538	22	122	449	1,007	4,400	365
235. Vankleek Hill		32	140	133	21	758	736	
236. Vienna				10	7	850		220
237. Walkerton	839		53	179	813	1,223	8,502	871
238. Walkerville			703	447	3,020		8,177	
239. Wallaceburg		7,155	110	107	955	1,323	5,220	
240. Wardsville			5			137	350	
241. Waterdown			20	135	32	375	925	
242. Waterford			22	5	6	567	2,826	
243. Waterloo	40,719	6,658	56	720	1,050	2,132	9,872	651
244. Watford			2	160	23	619	2,950	
245. Webbwood			29	77	453		1,923	
246. Welland	29,663	8,300	279	174	1,643	1,337	5,500	4,629
247. Wellington			40	12	10	469	1,125	
248. Weston	1,442	1,394	45	119	126	603	4,596	
249. Westport			10		32	193	1,283	
250. Whitby	1,652	1,085		109	816	1,433	7,190	
251. Wiarton	153		92	63	438	1,822	5,052	1,153
252. Winchester		215	10	218	25	338	2,588	
253. Wingham	6,649		7	133	733		13,004	2,740
254. Woodbridge					25	316	803	
255. Woodville				52	15	296	1,282	
256. Wroxeter		138		12		496	500	
257. Wyoming			40	4	1	282	1,225	

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Disbursements, 1907.—*Continued.*								Assets, Dec. 31, '07		
Other investments and deposits.	School debentures redeemed.	All other debentures redeemed.	Refund of moneys borrowed for current expenses	Interest on loans, advances and debentures.	Discount on debentures sold.	Miscellaneous.	Total disbursements.	Cash in treasury.	Taxes in arrears.	No.
$	$	$	$	$	$	$	$	$	$	
.....	.....	194	2,150	361	52	12	14,760	1,257	478	215
.....	783	2,110	24,000	6,647	.....	254	58,026	220	19,735	216
.....	.....	.....	.....	.....	.....	1	665	96	8	217
2,929	783	3,477	21,002	5,380	.....	3	86,827	.....	5,726	218
.....	.....	.....	1,645	306	.....	*4,565	7,738	177	1,734	219
.....	.....	113	650	118	.....	23	5,102	40	171	220
828	177	869	.....	465	.....	325	5,469	372	.....	221
.....	.....	368	.....	917	.....	3	8,456	270	36	222
330	.....	665	5,000	697	.....	215	14,839	162	350	223
.....	.....	445	1,500	345	.....	6	5,040	271	14	224
.....	.....	647	5,000	1,640	.....	†11,293	30,084	2,903	2,167	225
42	.....	465	4,452	403	.....	151	15,587	406	335	226
4,063	.....	3,082	9,200	2,294	.....	3,640	71,166	1,974	8,233	227
380	343	2,979	14,733	2,166	.....	229	35,886	36	2,612	228
30	.....	2,548	7,000	5,674	.....	1,226	42,540	1,741	839	229
.....	.....	.....	100	25	.....	124	2,044	201	698	230
.....	124	351	1,200	349	.....	54	6,766	674	750	231
.....	.....	26,631	49,223	8,737	3,605	1,933	114,138	.....	11,166	232
.....	469	.....	3,050	495	.....	123	16,021	432	4,941	233
.....	.....	2,748	18,000	2,338	.....	608	46,026	1,562	3,580	234
.....	274	463	150	1,150	.....	707	7,695	1,345	5,029	235
.....	.....	.....	500	298	.....	10	2,677	6	627	236
.....	.....	4,747	15,500	5,084	.....	758	45,073	343	1,178	237
.....	895	13,144	995	9,541	.....	3,136	96,798	507	460	238
3,015	929	5,992	.....	6,171	.....	1,563	39,516	3,448	3,857	239
.....	.....	.....	350	9	.....	69	1,282	361	572	240
.....	.....	.....	.....	1	.....	254	3,216	47	421	241
.....	216	203	2,080	318	.....	100	10,996	.....	119	242
10,117	.....	9,208	1,193	10,563	65	1,841	127,318	6	1,000	243
.....	820	1,140	11,146	1,816	.....	405	22,896	330	5	244
.....	191	.....	.....	121	.....	2,780	6,494	2,261	1,777	245
14,564	148	2,840	19,570	6,543	.....	‡6,737	122,929	252	6,141	246
.....	.....	200	1,185	64	.....	132	6,342	.....	184	247
368	705	311	.....	834	.....	540	27,815	3	1,743	248
.....	.....	.....	.....	33	.....	217	3,594	603	979	249
120	.....	2,931	69,943	6,694	.....	1,139	106,586	1,425	8,994	250
.....	247	3,321	104,841	8,754	.....	474	132,735	1,036	1,072	251
.....	938	216	5,500	445	.....	10	14,194	.....	209	252
.....	.....	4,071	8,600	6,712	.....	918	54,142	.....	813	253
.....	189	125	800	339	.....	51	4,305	1,122	571	254
.....	.....	132	1,104	142	.....	101	4,109	364	227	255
.....	138	193	400	384	.....	51	3,092	404	305	256
.....	.....	629	7,100	184	.....	69	16,739	456	1,079	257

* Including $4,400 Woollen Mills loan security written off assets.
† Including $11,000 bonus to mill.
‡ Including $6,000 for site for Ontario Iron and Steel Co.'s works.

STATISTICS OF ONTARIO VILLAGE AND TOWN

RECEIPTS, DISBURSEMENTS,

Villages and Towns.	Assets on December 31st, 1907.						Liabilities, Dec. 31	
	Sinking Fund investments and deposits.	All other investments and deposits.	Water works and electric light plant.	Other property.	Miscellaneous.	Total assets.	County levy.	Local school taxes.
	$	$	$	$	$	$	$	$
215. Streetsville			8,700	1,595	8,237	20,267		994
316. Sturgeon Falls			94,049	6,261	14,004	134,269		8,575
217. Sturgeon Point				866		970		
218. Sudbury		7,429	97,332	8,600	8,550	127,637		3,010
219. Sundridge	1,700			2,620	15	6,246		680
220. Sutton				3,262	10	3,483		
221. Tara		828		375		1,575		946
222. Teeswater	10,461	1,400	10,500	8,975		31,642		
223. Thamesville		330	7,250	9,925	7,986	26,003	273	
224. Thedford				140		425		
225. Thessalon	1,032		29,558	5,825	139	41,624		
226. Thornbury	1,907	1,316	60	2,800		6,824		
227. Thorold		4,063	56,331	18,500	8,233	97,334	958	2,007
228. Tilbury		1,137	15,676	2,600	27,623	49,684	246	
229. Tillsonburg	37,336	3,030	36,200	22,100	2,832	104,078		
230. Tiverton				2,000		2,899		
231. Tottenham			6,000	3,200	510	11,131	600	
232. Trenton			9,000	123,323	550	144,039		
233. Tweed				5,250		10,623	817	1,999
234. Uxbridge	365	2,500	18,000	24,550	213	50,770		
235. Vankleek Hill				6,191		12,565		4,255
236. Vienna	1,557			1,500		3,690	200	225
237. Walkerton	5,633	9,106	50,098	29,600		95,958		
238. Walkerville				16,647	202,859	220,473		
239. Wallaceburg		3,015		33,736	40	44,096		
240. Wardsville				800	37	1,770	169	262
241. Waterdown				1,000	75	1,543		
242. Waterford				4,650	16,300	21,069		1,962
243. Waterloo	2,113	35,028	101,000	54,750	125,230	319,127		
244. Watford		14,450		7,750	5	22,540		
245. Webbwood				300	176	4,514		1,500
246. Welland	36,052	8,564	87,288	40,053	45,574	223,924		2,000
247. Wellington			275	812	29	1,300		
248. Weston		368	8,800	5,675	2,606	19,195		1,670
249. Westford				350	6	1,938	758	
250. Whitby		120	77,609	21,650	20,643	130,441		
251. Wiarton	5,350	60,959	50,725	14,890	23,118	157,150	1,039	
252. Winchester				7,975	1,523	9,707		
253. Wingham	15,410	9,690	65,800	20,700		112,413	1,055	
254. Woodbridge		3,554	55	450	2,304	8,056		
255. Woodville			600	4,000	16	5,207		198
256. Wroxeter			100	9,126		9,935		
257. Wyoming				1,225	145	2,905		

MUNICIPALITIES OF ONTARIO, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES, 1907.—*Continued.*

Liabilities on December 31st, 1907.

Railway debentures.	School debentures.	Water works debentures.	Electric light debentures.	All other debentures.	Loans for current expenses and interest.	Due Sinking Fund.	Miscellaneous.	Total liabilities.	No.
$	$	$	$	$	$	$	$	$	
.....	.....	.....	.....	3,846	8,900	.....	2,800	16,540	215
.....	19,660	17,125	39,066	37,866	26,357	.....	1,715	150,364	216
.....	.....	.....	.....	.....	.....	.....	.....	.....	217
.....	21,968	22,003	28,589	14,426	17,539	.....	5,165	112,700	218
.....	.....	.....	.....	5,100	.....	1,700	55	7,535	219
.....	.....	.....	.....	2,572	.....	.....	.....	2,572	220
.....	2,762	.....	.....	7,561	.....	.....	.....	11,269	221
.....	.....	10,444	.....	9,772	.....	.....	.....	20,216	222
.....	.....	.....	6,138	6,427	.....	.....	247	13,085	223
.....	.....	.....	.....	6,159	550	.....	.....	6,709	224
.....	.....	13,383	11,784	13,773	4,100	.....	307	43,347	225
.....	.....	.....	.....	10,392	.....	.....	127	10,519	226
.....	.....	.....	2,644	28,585	45,100	.....	587	79,881	227
.....	2,000	3,994	.....	29,781	9,597	.....	2,067	47,685	228
5,189	9,000	.....	.....	101,753	.....	.....	.....	115,942	229
.....	.....	.....	.....	.....	400	.....	.....	400	230
.....	873	.....	4,908	813	123	.....	.....	7,317	231
.....	.....	.....	.....	151,961	6,104	.....	5,239	163,304	232
.....	9,167	.....	.....	.....	4,500	.....	273	16,756	233
9,000	4,500	7,732	.....	18,566	8,000	.....	929	48,727	234
.....	9,190	.....	.....	13,473	.....	.....	2,123	29,041	235
3,000	.....	.....	.....	1,600	.....	.....	.....	5,025	236
.....	4,300	37,439	.....	66,778	.....	.....	3,304	111,821	237
.....	47,429	.....	.....	128,491	38,000	.....	431	214,351	238
.....	.....	.....	.....	114,589	.....	.....	.....	114,589	239
.....	.....	.....	.....	.....	307	.....	712	1,450	240
.....	.....	.....	.....	.....	.....	.....	.....	.....	241
.....	4,501	.....	.....	907	1,849	.....	1,729	10,948	242
.....	.....	60,832	.....	192,619	22,343	.....	3,884	279,678	243
.....	5,214	.....	.....	26,167	1,000	.....	.....	32,381	244
.....	2,217	.....	.....	.....	.....	.....	26	3,743	245
.....	13,572	64,371	.....	40,207	50,543	.....	.....	170,693	246
.....	.....	.....	.....	1,200	400	.....	134	1,734	247
.....	6,722	.....	4,834	.....	13,169	.....	1,677	28,072	248
.....	.....	.....	.....	.....	.....	.....	555	1,313	249
.....	.....	60,078	.....	64,215	25,773	.....	4,577	154,643	250
.....	10,794	47,596	.....	107,385	24,984	.....	.....	191,798	251
.....	2,008	.....	.....	3,736	1,250	.....	15	7,009	252
.....	18,000	20,898	27,729	84,386	2,172	.....	463	154,703	253
.....	5,134	.....	.....	1,256	2,854	.....	.....	9,244	254
.....	.....	.....	.....	3,001	.....	.....	.....	3,199	255
.....	4,862	.....	.....	3,822	.....	.....	.....	8,684	256
.....	.....	.....	.....	7,058	.....	.....	70	7,128	257

STATISTICS OF ONTARIO CITY

RECEIPTS, DISBURSEMENTS

City Municipalities and County in which located.	Receipts, 1907.							
	Balance from 1906.	Municipal and School taxes.	Liquor licenses.	Other licenses.	Fees, rents, tolls, fines, etc.	Water rates, electric light, etc.	Interest and dividends.	From Government, except for loans and schools.
	$	$	$	$	$	$	$	$
Belleville (Hastings)	.....	104,296	3,768	1,615	3,249	95,523	7,581	.....
Brantford (Brant)	3,613	231,540	4,402	3,376	6,249	45,911	20,591	.....
Chatham (Kent)	4,316	158,327	3,124	968	4,054	17,814	407	.....
Fort William (Thunder Bay)	390	113,252	3,521	2,261	10,453	76,540	7,769	.....
Guelph (Wellington)	6,391	106,545	3,774	1,292	23,033	160,681	9,519	250
Hamilton (Wentworth)	5,743	726,510	29,321	7,020	75,099	250,105	22,692	7,519
Kingston (Frontenac)	30,312	175,984	8,378	1,396	6,459	114,616	8,067	.....
London (Middlesex)	1,976	540,941	10,175	4,630	27,923	95,329	15,169	69
Niagara Falls (Welland)	2	101,632	4,587	873	2,225	48,369	3,281	.....
Ottawa (Carleton)	4,242	947,682	32,642	8,811	38,122	235,378	167,547	.....
Peterborough (Peterborough)	.....	133,374	5,202	2,550	11,909	34,771	6,469	53
Port Arthur (Thunder Bay)	12,729	94,648	4,131	2,569	4,819	*144,708	20,674	450
St. Catharines (Lincoln)	8,285	159,752	4,887	1,567	3,287	29,284	4,304	743
St. Thomas (Elgin)	2,011	146,983	4,302	1,049	2,286	129,880	1,829	3,000
Stratford (Perth)	270	157,536	4,060	1,463	1,827	21,917	11,082	.....
Toronto (York)	364,219	4,098,163	110,151	51,867	†836,722	536,615	263,890	35,156
West Toronto (York)	14,326	123,789	.....	1,023	477	20,720	674	.....
Windsor (Essex)	2,483	218,768	6,028	987	5,817	50,475	9,069	.....
Woodstock (Oxford)	4,637	82,856	2,068	1,245	2,256	48,577	10,307	250
Totals :								
1907	465,945	8,422,578	244,521	96,557	1,066,266	2,157,214	590,921	47,490
1906	518,637	7,838,673	248,354	86,699	957,358	1,829,889	457,158	46,198
1905	517,079	7 085,528	94,657	77,306	903,269	1,623,677	442,294	39,249
1904	401,440	6,780,953	95,556	72,955	754,636	1,368,568	465,058	42,186
1903	790,766	6,543,882	103,245	76,450	658,159	1,298,767	380,799	44,471
1902	409,575	6,506,033	103,198	58,959	631,040	1,242,240	421,082	12,502
1901	286,213	6,058,111	103,408	56,442	591,113	1,081,282	376,605	15,406
1900	590,631	5,872,998	101,636	52,519	483,396	1,041,769	390,376	16,228
1899	866,094	5,549,981	105,726	52,155	444,227	1,131,315	375,736	19,162
1898	634,227	5,386,991	103,625	49,890	419,552	1,081,371	366,154	17,053

NOTE.—The totals given in this table are for the 19 cities for each of the 10 years.

* Including $44,354 gas and electric-light and power rates, $75,830 electric railway revenue, and $13,281 telephone rates.

† Including $500,601 street railway revenue.

MUNICIPALITIES, FOR THE YEAR 1907.

ASSETS AND LIABILITIES.

Receipts, 1907.—*Concluded.*						
Refund from Sinking Fund and other investments.	Money borrowed for current expenses.	Money borrowed on debentures.		Miscellaneous.	Total Receipts.	City Municipalities.
		For School purposes.	For all other purposes.			
$	$	$	$	$	$	
31,001	42,627	3,000	19,959	26,447	339,066	Belleville.
21,250	123,000	38,000	82,523	13,764	594,219	Brantford.
8,316	186,000	.....	65,000	7,002	455,323	Chatham.
78,409	156,917	16,000	350,824	10,725	827,061	Fort William.
55,065	11,073	6,000	100,517	7,659	491,799	Guelph.
950	131,946	.....	470,868	145,449	1,873,223	Hamilton.
19,041	92,326	.....	135,531	46,600	638,710	Kingston.
606,535	682,500	15,000	120,790	15,449	2,136,486	London.
17,127	77,010	.....	36,635	1,406	293,147	Niagara Falls.
1,053,460	1,081,289	457,000	561,159	63,596	4,650,928	Ottawa.
39,947	146,356	....	73,244	4,161	458,036	Peterborough.
19,397	323,074	70,000	551,000	16,045	1,264,244	Port Arthur.
37,911	91,448	5,000	88,414	4,637	439,519	St. Catharines.
14,996	293,000	.....	26,791	9,405	635,532	St. Thomas.
18,242	100,000	.....	55,505	8,016	379,918	Stratford.
2,428,626	1,422,939	449,286	2,492,417	227,377	13,317,128	Toronto.
16,948	.....	.....	.....	6,386	184,343	West Toronto.
16,089	199,790	.....	30,000	2,313	541,819	Windsor.
11,053	306,000	20,000	57,879	13,167	560,295	Woodstock.
						Totals:
4,494,363	5,467,295	1,079,286	5,319,056	629,604	30,081,096	1907.
3,646,557	4,545,584	356,937	4,434,437	819,680	25,786,161	1906.
2,186,145	3,430,389	184,259	4,123,295	570,124	21,277,271	1905.
4,371,659	3,595,941	252,579	4,948,640	550,394	23,700,565	1904.
1,663,444	3,859,240	117,100	2,274,151	414,527	18,224,971	1903.
1,747,006	3,470,904	347,200	1,495,463	423,702	16,868,904	1902.
1,882,906	2,300,005	52,300	2,796,363	383,126	15,983,280	1901.
995,679	3,186,589	62,500	1,420,190	195,256	14,409,767	1900.
2,279,157	2,628,512	16,000	2,381,381	251,100	16,100,549	1899.
2,409,164	1,675,905	233,046	2,982,321	363,663	15,722,962	1898.

STATISTICS OF ONTARIO CITY

RECEIPTS, DISBURSEMENTS,

City Municipalities and County in which located.	Disbursements, 1907. Allowances, salaries and commissions.	Printing, advertising, postage and stationery.	Insurance, heating and lighting of buildings.	Law costs (including salaries).	Lighting of streets.	Water supply and fire protection.	Election of members of council.	Other expenses of municipal government.
	$	$	$	$	$	$	$	$
Belleville (Hastings)	3,238	968	3,537	1,200	3,617	31,555	110	*31,621
Brantford (Brant)	10,145	1,582	2,466	1,042	14,468	52,412	603	3,440
Chatham (Kent)	5,438	798	1,792	1,004	5,947	18,217	356	310
Fort William (Thunder Bay)	7,354	1,439	3,242	938	3,958	28,231	76	24,377
Guelph (Wellington)	4,467	1,306	3,434	986	6,245	19,297	454	†70,919
Hamilton (Wentworth)	34,083	2,801	5,045	7,360	40,311	132,917	1,121	36,552
Kingston (Frontenac)	12,697	3,975	3,909	2,153	8,951	27,589	345	*67,953
London (Middlesex)	22,642	5,105	8,563	3,384	28,088	87,262	1,273	2,531
Niagara Falls (Welland)	6,397	1,071	2,000	506	6,779	15,780	157	19,179
Ottawa (Carleton)	22,483	9,375	10,506	9,951	24,562	149,624	1,096	90,697
Peterborough (Peterborough)	7,702	1,085	4,379	984	5,971	36,299	640	1,065
Port Arthur (Thunder Bay)	10,378	2,520	2,614	1,000	2,746	17,292	195	‡73,556
St. Catharines (Lincoln)	7,287	1,403	2,109	1,334	9,336	15,714	200	179
St. Thomas (Elgin)	6,873	1,634	2,835	302	11,194	28,444	430	‖78,256
Stratford (Perth)	6,543	1,670	2,516	828	7,995	25,042	347	270
Toronto (York)	180,958	16,492	91,389	53,769	112,006	599,530	8,441	65,757
West Toronto (York)	3,730	742	841	2,164	7,570	24,545	177	586
Windsor (Essex)	10,083	1,059	3,595	1,900	16,737	37,895	399	391
Woodstock (Oxford)	2,839	1,011	1,514	232	5,180	24,809	122	14,380
Totals:								
1907	365,337	56,036	156,286	91,037	321,661	1,372,484	16,542	582,019
1906	362,624	51,844	246,856	70,839	321,128	1,261,537	17,966	439,440
1905	302,029	49,116	144,775	72,904	363,082	1,103,315	18,787	303,835
1904	276,821	42,156	115,070	89,332	366,211	1,149,193	17,646	100,654
1903	265,617	36,079	138,658	55,901	329,054	1,100,531	12,185	91,325
1902	258,069	36,548	88,752	64,732	315,120	983,587	12,058	57,087
1901	250,065	37,310	71,395	65,643	306,807	916,122	11,652	173,956
1900	239,881	42,456	62,166	59,542	288,934	875,782	12,304	128,526
1899	250,230	39,326	59,717	52,964	259,765	773,637	10,336	103,808
1898	205,700	43,278	51,573	61,825	274,788	863,763	12,173	93,486

* Including $29,894 maintenance gas supplied private users.
† Including $21,286 maintenance railway, and $49,101 maintenance electric light and power supplied private users.
‡ Including $54,233 street railway maintenance, $3,782 maintenance electric light and power supplied private users, and $8,252 telephone rents.
‖ Including $25,506 maintenance and operation street railway, and $48,992 maintenance electric light and power supplied private users.

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES.—*Continued.*

Disbursements, 1907.—*Continued.*								
Streets, bridges and parks.	Construction of waterworks, sewers and electric light.	Buildings and other property.	Board of Health (including salaries).	Support of the poor and other charities.	Administration of justice, police service, etc.	Payments on schools and education.	Sinking Fund investments and deposits.	City Municipalities.
$	$	$	$	$	$	$	$	
29,847	66,653	.....	1,676	3,260	8,318	23,176	57,758	Belleville.
48,551	50,690	8,027	13,606	11,087	11,598	84,608	37,818	Brantford.
64,196	7,035	5,829	3,413	2,104	7,452	31,912	.....	Chatham.
108,914	251,769	16,984	11,630	4,197	8,741	46,896	83,708	Fort William.
36,809	76,014	100	3,074	6,045	9,616	40,201	14,919	Guelph.
190,728	190,549	96,494	21,679	73,319	93,685	161,238	55,756	Hamilton.
39,012	67,308	125	1,077	5,979	15,632	44,432	32,353	Kingston.
143,812	79,108	8,421	2,493	35,860	47,239	173,802	232,485	London.
23,034	45,057	781	2,935	2,739	7,120	23,171	.....	Niagara Falls.
518,627	122,590	534	45,812	21,520	74,468	403,889	1,130,645	Ottawa.
69,745	48,498	3,541	2,035	2,525	9,210	101,445	60,580	Peterborough.
167,121	315,747	18,773	10,357	2,469	6,319	85,852	16,841	Port Arthur.
40,364	19,620	998	1,316	2,149	7,657	35,527	19,790	St. Catharines.
31,605	20,764	.....	2,625	4,700	8,091	38,136	.....	St. Thomas.
41,216	35,436	.....	2,934	3,457	7,038	34,721	34,782	Stratford.
*2,576,619	278,616	784,983	68,240	160,091	593,390	1,347,632	2,890,766	Toronto.
20,679	7,961	.....	4,580	675	4,604	47,053	.....	West Toronto.
75,614	11,648	131	5,845	3,655	11,500	49,415	15,880	Windsor.
12,810	24,513	18,060	592	1,663	3,539	34,008	25,165	Woodstock.
								Totals:
4,239,303	1,719,606	963,781	205,919	347,494	935,217	2,807,114	4,709,246	1907.
3,387,115	1,598,623	663,833	169,165	438,933	874,733	2,050,844	4,012,682	1906.
2,879,519	1,741,312	639,499	140,039	267,946	805,321	2,019,351	2,760,224	1905.
2,509,622	1,144,677	359,464	136,882	226,316	760,788	1,689,078	3,953,888	1904.
2,264,201	736,224	410,279	104,456	229,477	718,450	1,610,054	2,001,408	1903.
1,936,241	652,777	331,547	120,929	220,147	688,411	1,566,559	1,711,270	1902.
1,751,264	443,920	229,295	110,477	195,044	637,352	1,385,187	1,728,050	1901.
1,962,803	694,387	202,167	86,301	204,369	576,411	1,504,996	994,394	1900.
1,705,663	664,895	380,482	75,665	188,186	564,187	1,209,312	2,411,532	1899.
1,316,708	424,281	473,478	70,625	180,846	541,783	1,343,656	2,183,919	1898.

* Including $135,546 for scavenging, $128,576 street cleaning, and $9,434 for maintenance of crematory.

STATISTICS OF ONTARIO CITY

RECEIPTS, DISBURSEMENTS

Disbursements, 1907.—*Continued.*

City Municipalities and County in which located.	Other investments and special deposits.	Debentures redeemed.		Interest or discount on loans, etc.	Refund of money borrowed for current expenses	Discount on debentures sold.
		Principal.	Interest.			
	$	$	$	$	$	$
Belleville (Hastings)	450	5,187	36,304	1,828	22,646	.....
Brantford (Brant)	83,989	23,727	56,666	2,558	56,678	.....
Chatham (Kent)	*43,341	45,736	38,064	13,924	131,000	.....
Fort William (Thunder Bay)	1,329	6,648	39,693	31,530	62,858	18,480
Guelph (Wellington)	61,407	10,151	45,881	2,342	61,000	11,962
Hamilton (Wentworth)	10,778	163,841	183,360	11,239	191,818	32,053
Kingston (Frontenac)	17,578	24,538	51,711	6,091	152,389	.....
London (Middlesex)	146,329	103,267	131,310	5,865	784,786	11,930
Niagara Falls (Welland)	.....	20,921	25,059	3,059	58,711	2,440
Ottawa (Carleton)	861,685	160,010	282,385	34,749	635,821	.....
Peterborough (Peterborough)	.....	319	36,262	3,859	55,949	2,559
Port Arthur (Thunder Bay)	65,393	21,071	67,435	25,626	293,870	36,239
St. Catharines (Lincoln)	24,855	43,531	48,482	4,796	119,314	1,238
St. Thomas (Elgin)	21,615	47,726	40,178	2,375	270,806	808
Stratford (Perth)	6,254	17,291	37,546	5,197	87,000	1,261
Toronto (York)	269,698	810,604	923,493	83,046	619,716	164,630
West Toronto (York)	38,373	.....	15,940	.....	.....	.....
Windsor (Essex)	1,126	83,973	40,158	6,134	147,220	420
Woodstock (Oxford)	2,993	14 669	28,380	3,241	332,714	.....
Totals:						
1907	1,657,193	1,603,240	2,128,307	247,459	4,084,296	284,020
1906	1,320,659	1,896,508	1,965,443	118,058	3,574,882	73,645
1905	528,039	910,926	1,835,023	207,815	3,187,492	44,186
1904	450,420	2,546,624	1,833,857	146,613	4,633,406	229,289
1903	741,165	1,038,519	1,710,502	150,062	3,592,691	32,039
1902	362,942	1,245,560	1,775,182	157,323	2,888,733	16,083
1901	377,294	1,410,900	1,789,572	113,978	2,969,665	39,325
1900	428,743	1,433,721	1,732,495	135,184	2,066,224	6,856
1899	250,104	1,203,555	1,672,657	122,807	3,183,239	9,395
1898	165,470	2,420,091	1,656,907	201,480	1,891,379	5,010

MUNICIPALITIES, FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES.—*Continued.*

Disbursements.—*Concluded.*			Assets on December 31, 1907.				
Library.	Miscellaneous.	Total disbursements.	Cash in treasury (exclusive of S. Fund).	Taxes in arrears.	Sinking Fund investments and deposits.	Other investments and special deposits.	City Municipalities.
$	$	$	$	$	$	$	
1,000	5,117	339,066	.....	61,934	173,055	25,566	Belleville.
4,551	6,368	586,710	7,509	5,669	384,881	*167,669	Brantford.
1,723	6,442	436,033	19,290	69,892	.....	98,428	Chatham.
.....	63,376	826,368	693	39,784	173,777	42,001	Fort William.
2,690	.....	489,319	2,480	40,361	223,705	258,088	Guelph.
12,757	102,968	1,852,452	20,771	235,550	636,400	149,802	Hamilton.
.....	25,206	611,003	27,707	4,089	114,327	45,778	Kingston.
8,464	4,113	2,078,132	58,354	37,749	382,186	1,037,336	London.
1,466	24,785	293,147	.....	30,435	.....	.....	Niagara Falls.
20,178	19,703	4,650,910	18	116,500	2,895,545	904,315	Ottawa.
40	3,314	458,036	.....	9,436	180,052	†	Peterborough.
374	15,552	1,259,340	4,904	68,827	104,501	267,971	Port Arthur.
3,000	23,728	433,927	5,592	23,685	106,982	50,978	St. Catharines.
2,375	6,522	628,294	7,238	24,943	30,000	24,115	St. Thomas.
1,500	18,610	379,454	464	36,000	218,672	13,230	Stratford.
43,090	96,475	12,839,431	477,997	923,724	7,907,943	31,588	Toronto.
400	3,682	184,302	41	19,935	.....	38,373	West Toronto.
3,330	9,118	537,226	4,593	38,593	178,448	1,120	Windsor.
1,696	3,695	557,855	2,440	8,289	239,664	21,735	Woodstock.
							Totals:
108,634	438,774	29,441,005	640,091	1,795,395	13,950,138	3,178,093	1907.
101,808	301,051	25,320,216	465,945	1,655,239	12,589,007	2,597,372	1906.
84,143	349,956	20,758,634	518,637	1,638,977	11,702,273	1,802,322	1905.
90,924	314,555	23,183,486	517,079	1,669,999	10,657,120	1,750,357	1904.
69,684	381,970	17,823,531	401,440	1,761,437	10,357,171	2,027,857	1903.
71,791	516,690	16,078,138	790,766	1,866,932	9,537,652	1,818,697	1902.
58,571	500,861	15,573,705	409,575	2,217,157	9,222,556	1,806,587	1901.
58,289	326,620	14,123,554	286,213	2,267,489	8,912,703	1,918,302	1900.
56,951	261,505	15,509,918	590,631	2,203,865	8,714,280	1,800,206	1899.
55,775	318,874	14,856,868	866,094	2,357,063	8,291,586	1,840,421	1898.

* Including $3,000 increase in value of gas stock, and $82,322 unsold debentures hypothecated to bank.

† Omitting $26,000 mortgage transferred to Sinking Fund.

STATISTICS OF ONTARIO CITY

RECEIPTS, DISBURSEMENTS,

City Municipalities and County in which located.	Assets on December 31, 1907.—*Concluded.*					Liabilities	
	Land, buildings, library, etc.	Waterworks and electric light plant.	Other property, (cemetery, fire-halls, etc).	Miscellaneous.	Total assets.	Local school rates unpaid.	Debentures: Aid to railways.
	$	$	$	$	$	$	$
Belleville (Hastings)	98,307	306,725	.....	176,727	842,314	.....	.....
Brantford (Brant)	336,959	425,232	35,086	301,238	1,664,243	.....	107,000
Chatham (Kent)	140,855	228,182	33,000	591,434	1,181,081	.....	.....
Fort William (Thunder Bay)	178,715	530,160	15,066	409,113	1,389,309	.....	15,000
Guelph (Wellington)	173,828	542,143	*51,616	262,439	1,554,660	.....	193,000
Hamilton (Wentworth)	1,111,481	2,278,410	†1,014,924	766,749	6,214,087	.....	250,000
Kingston (Frontenac)	248,007	620,354	30,504	76,809	1,167,575	.....	54,627
London (Middlesex)	536,500	884,455	18,750	78,034	3,033,364	.....	325,000
Niagara Falls (Welland)	29,400	284,000	30,050	272,904	646,789	.....	.....
Ottawa (Carleton)	687,750	2,550,000	143,000	1,388,508	8,685,636	.....	370,000
Peterborough Peterborough)	178,652	325,956	25,000	282,967	1,002,063	.....	.....
Port Arthur (Thunder Bay)	108,023	‖1,136,940	27,927	356,939	2,076,032	21,513	75,000
St. Catharines (Lincoln)	152,598	404,675	45,730	161,393	951,633	1,095	61,320
St. Thomas (Elgin)	237,300	480,712	15,800	27,527	847,635	.....	19,273
Stratford (Perth)	119,500	150,000	‡75,000	68,500	681,366	.....	60,000
Toronto (York)	11,035,000	6,000,000	600,000	4,086,771	31,063,923	.....	1,143,718
West Toronto (York)	23,000	220,000	25,000	520,120	846,469	27,230	.....
Windsor (Essex)	144,775	302,000	22,000	82,302	773,831	835	.....
Woodstock (Oxford)	109,200	283,726	15,300	18,095	698,449	.....	.....
Totals:							
1907	15,649,850	17,953,670	2,223,753	9,928,569	65,319,559	50,673	2,673,938
1906	14,982,335	16,536,169	2,003,842	8,566,741	59,396,650	54,888	2,675,856
1905	14,518,182	15,191,364	1,890,660	7,513,996	54,806,411	35,857	2,677,694
1904	14,179,450	14,136,806	1,806,795	6,486,986	51,204,590	30,743	2,552,112
1903	13,595,690	12,790,250	1,642,656	6,849,294	49,425,795	29,371	2,553,468
1902	13,537,308	12,479,279	1,601,015	5,908,798	47,543,477	25,587	2,554,767
1901	13,457,337	12,038,039	1,563,478	5,099,940	45,814,669	17,854	2,506,009
1900	13,408,936	11,853,169	1,596,569	4,907,776	45,151,157	43,667	2,396,533
1899	13,223,212	11,490,851	1,572,442	4,842,039	44,437,526	24,334	2,439,202
1898	13,192,738	11,201,992	1,565,235	4,612,522	43,927,651	41,135	2,471,057

* Including $43,938 sewage disposal system.
† Including $968,436 sewage disposal system.
‡ Including $50,000 sewage disposal system.
‖ Including $68,711 telephone system, and $202,780 electric railway plant.

MUNICIPALITIES; FOR THE YEAR 1907.—*Continued.*

ASSETS AND LIABILITIES.—*Continued.*

on December 31, 1907.

outstanding.

Schools.	Local improvements.	Municipal works.	All other objects.	Loans for current expenses.	Miscellaneous.	Total liabilities.	City Municipalities.
$	$	$	$	$	$	$	
11,500	80,769	276,349	476,000	67,895	7,145	919,658	Belleville.
127,920	312,323	415,330	480,833	70,000	30,310	1,543,716	Brantford.
.....	381,866	138,063	366,979	261,000	.....	1,147,908	Chatham.
96,800	197,373	523,355	294,861	456,716	23,672	1,607,777	Fort William.
70,136	203,668	339,099	334,234	105,849	200	1,246,186	Guelph.
190,395	625,335	1,270,872	2,587,739	131,946	60,536	5,116,823	Hamilton.
43,896	235,916	505,375	388,100	67,326	26,057	1,321,297	Kingston.
125,100	660,790	829,629	1,266,854	107,500	160,155	3,475,028	London.
22,523	253,882	168,420	114,513	87,751	.....	647,089	Niagara Falls.
889,500	1,188,508	1,887,251	3,492,808	1,250,090	153,257	9,231,414	Ottawa.
109,551	242,837	302,000	239,400	146,356	9,707	1,049,851	Peterborough.
107,500	212,948	1,039,433	259,750	428,985	1,767	2,146,896	Port Arthur.
10,000	149,072	70,000	863,069	79,116	5,808	1,239,480	St. Catharines.
96,443	169,105	358,145	266,353	50,187	3,692	963,198	St. Thomas.
25,436	302,157	158,929	374,000	85,000	34,555	1,040,077	Stratford.
2,664,681	8,107,947	4,669,537	11,357,860	1,422,939	4,281,174	33,647,856	Toronto.
.....	*	.....	1,062,650	.....	20,440	1,110,320	West Toronto.
148,197	338,651	118,139	238,371	114,499	4,292	962,984	Windsor.
41,700	143,348	248,077	297,093	39,561	6,396	776,175	Woodstock.
							Totals:
4,781,278	13,806,495	13,318,003	24,761,467	4,972,716	4,829,163	69,193,733	1907.
3,812,557	12,579,724	11,917,389	23,560,553	3,521,151	4,156,695	62,278,813	1906.
3,489,658	11,438,137	11,743,857	22,266,867	2,314,724	3,980,754	57,947,548	1905.
3,356,167	10,301,318	11,034,292	20,977,758	2,086,376	2,925,067	53,263,833	1904.
3,148,129	9,709,193	9,437,852	20,718,410	3,116,016	1,726,883	50,439,322	1903.
3,070,364	9,142,266	9,441,554	20,005,369	2,902,247	1,566,190	48,708,344	1902.
2,811,053	9,456,757	8,930,549	19,906,263	2,336,794	1,590,479	47,555,758	1901.
2,751,019	8,817,258	8,645,870	19,562,189	3,006,831	1,685,988	46,909,355	1900.
2,738,439	9,606,347	8,534,700	18,805,212	1,856,866	1,643,446	45,648,546	1899.
2,762,225	9,875,657	7,774,125	18,047,010	2,410,367	1,643,154	45,024,730	1898.

*$100,000 local improvement debentures were authorized by Act of Parliament and were issued, but negotiations for sale were not completed in 1907.

STATISTICS OF ONTARIO

Showing abstract statement of Receipts, Disbursements, Assets and Liabilities

County Municipalities.	Receipts, 1907.						
	Balance from 1906.	Rates from local municipalities.	Licenses.	Fees, rents, tolls, fines, etc.	Surplus fees from Registrar.	Interest and dividends.	From Legislature for schools.
	$	$	$	$	$	$	$
1. Brant	13,653	14,837	180	321	264	236	5,789
2. Bruce	1,559	53,962	684	170	1,873	22	13,584
3. Carleton	5,125	27,757	457	309	559	1,289	11,020
4. Dufferin	344	10,967	321	76	.....	37	5,526
5. Elgin	8,893	40,313	378	163	89	185	9,762
6. Essex	27	41,161	503	214	1,290	.....	10,713
7. Frontenac	188	31,594	97	51	.....	364	11,672
8. Grey	7	44,075	1,298	66	750	1,454	15,381
9. Haldimand	27	32,448	310	255	131	.....	5,219
10. Haliburton	392	3,209	148	96	.....	7	7,953
11. Halton	.....	16,508	136	487	.....	4	4,301
12. Hastings	15	48,541	330	35	712	355	16,263
13. Huron	1,798	76,751	1,048	140	1,461	1,875	14,997
14. Kent	850	27,081	693	139	2,177	115	12,885
15. Lambton	14,465	49,297	237	126	1,148	246	11,238
16. Lanark	.....	39,619	165	40	.....	230	7,174
17. Leeds and Grenville	11,623	31,403	999	66	117	1,042	11,690
18. Lennox and Addington	6,682	29,192	311	96	.....	251	7,423
19. Lincoln	2,241	29,135	255	200	1,256	69	4,457
20. Middlesex	47,636	75,452	592	13	164	1,225	16,845
21. Norfolk	7,590	24,941	296	153	43	42	6,058
22. Northumberland & Dur.	15,001	56,862	858	9	8	726	13,663
23. Ontario	15,274	41,504	654	18	279	.....	10,098
24. Oxford	36,859	44,232	880	31	606	478	12,369
25. Peel	5,491	30,319	210	117	.....	709	5,968
26. Perth	7,166	84,857	789	.....	227	631	11,582
27. Peterborough	9,530	23,632	300	83	476	592	7,891
28. Prescott and Russell	.....	21,712	722	246	260	376	11,539
29. Prince Edward	.....	28,391	75	30	.....	.....	4,047
30. Renfrew	1,503	26,223	291	5	174	312	8,474
31. Simcoe	5,402	77,543	830	458	3,541	99	16,359
32. Stormont, Dun. & Glen.	.....	34,035	1,392	73	.....	.....	12,562
33. Victoria	819	35,308	762	318	70	164	9,864
34. Waterloo	22	40,585	262	69	1,292	.....	9,035
35. Welland	3,538	23,534	181	5	1,363	22	4,885
36. Wellington	13,676	49,856	356	371	108	244	14,421
37. Wentworth	.....	34,600	152	331	1,996	80	7,848
38. York	385	57,773	518	1,361	2,556	28	17,021
Totals:							
1907	237,781	1,459,209	18,670	6,741	24,990	13,509	387,576
1906	231,836	1,529,950	19,792	7,900	22,283	17,452	198,212
1905	222,494	1,320,461	19,261	9,211	18,572	21,149	142,464
1904	292,195	1,180,799	19,103	7,735	16,795	15,892	138,341
1903	244,271	1,115,242	15,613	7,596	17,929	15,002	141,129
1902	190,104	1,114,766	15,102	9,020	14,520	12,505	137,792
1901	192,995	1,060,743	15,456	10,132	12,614	10,808	144,370
1900	220,596	1,099,357	15,206	12,305	16,131	13,241	142,954
1899	179,638	1,110,356	14,971	11,666	11,716	12,469	149,361
1898	227,866	1,047,924	14,227	11,573	10,957	17,475	147,418

COUNTY MUNICIPALITIES.

of the County Municipalities for the year ending December 31st, 1907.

Receipts, 1907.—*Continued.*								Disbursements, 1907.		
From Legislature for administration of justice.	Refund of moneys loaned or invested.	Money borrowed for current expenses.	Money borrowed on debentures.	Non-resident taxes collected.	Towns or cities separated from county for various services.	Miscellaneous.	Total Receipts.	Attendance at meetings of council and committees.	Allowances, salaries and commissions.	No.
$	$	$	$	$	$	$	$	$	$	
2,894	.....	.....	.....	124	3,456	1,789	43,543	700	1,430	1
3,216	.....	30,000	20,000	1,391	.....	1,365	127,826	2,282	2,971	2
4,278	.....	110,000	.....	1,165	11,000	1,030	173,989	1,120	2,287	3
1,197	.....	9,000	.....	162	.....	22	27,652	627	1,440	4
4,433	.....	51,000	16,250	734	3,532	2,207	137,939	1,399	2,520	5
3,882	.....	14,231	.....	6,381	2,697	1,792	82,891	1,087	2,450	6
1,951	.....	115,812	.....	2,075	4,899	185	168,888	3,828	2,174	7
2,972	13,146	.....	.....	803	.....	1,397	81,349	2,422	2,442	8
2,621	.....	7,584	.....	105	.....	319	49,019	1,579	1,093	9
.....	.....	161	.....	1,027	.....	.....	12,933	214	663	10
1,526	.....	2,000	.....	62	.....	359	25,383	631	1,150	11
4,812	.....	58,284	.....	621	4,700	*12,997	147,665	2,735	3,760	12
3,239	13,990	55,000	.....	195	.....	2,492	172,986	2,071	3,173	13
4,747	.....	35,853	.....	5,328	2,726	1,162	93,756	2,099	2,404	14
2,367	.....	20,000	.....	3,334	.....	298	102,756	1,785	2,261	15
2,380	8,049	17,000	.....	638	.....	†13,842	89,137	1,331	2,035	16
2,685	.....	.....	.....	812	2,980	575	63,992	1,748	2,440	17
1,908	.....	.....	.....	371	.....	‡16,284	62,518	1,307	1,090	18
2,799	.....	12,000	.....	379	1,938	6,568	61,297	925	1,712	19
7,675	20,000	.....	20,000	434	7,741	8,388	206,165	2,895	3,900	20
1,299	.....	.....	.....	531	.....	382	41,335	1,069	1,310	21
3,687	.....	34,000	.....	57	.....	5,057	129,928	3,574	2,460	22
1,435	.....	117,000	.....	349	.....	678	187,289	2,163	2,000	23
2,549	.....	51,088	50,000	152	3,858	2,132	205,234	2,977	2,068	24
2,757	.....	30,000	29,522	47	.....	63	105,203	693	1,465	25
2,601	.....	31,000	.....	180	3,004	‖14,451	156,488	1,202	1,845	26
1,875	584	11,482	2,000	1,166	158	5,424	65,193	990	1,280	27
1,741	.....	9,957	.....	2,608	.....	4,925	54,086	1,371	1,070	28
907	.....	3,931	15,000	116	.....	286	52,783	813	1,145	29
2,448	.....	5,142	14,000	624	.....	¶13,874	73,070	1,727	1,791	30
4,233	.....	65,000	.....	1,569	.....	3,178	178,212	4,320	3,875	31
2,588	.....	24,555	.....	434	.....	977	76,616	1,782	1,800	32
1,550	1,518	47,000	.....	513	550	3,156	101,592	1,426	2,131	33
.....	.....	42,766	.....	.....	.....	5,269	99,300	1,464	1,445	34
3,435	.....	.....	.....	1,893	3,500	1,953	44,309	900	1,270	35
4,283	.....	35,000	.....	70	3,291	6,997	128,673	1,600	2,188	36
9,585	.....	21,645	.....	612	8,914	§22,957	108,720	2,159	4,017	37
1,077	.....	18,232	.....	218	4,276	758	104,203	3,083	2,580	38
109,632	57.287	1,085,723	166,772	37,280	73,220	165,588	3,843,978	66,098	79,135	
139,768	86,497	783,697	222,600	37,839	80,255	143,654	3,521,735	54,203	77,314	
122,228	60,909	822,650	136,800	33,589	64,159	121,485	3,115,432	48,526	78,863	
131,922	62,859	837,834	225,033	28,120	74,557	148,046	3,179,231	54,358	73,783	
90,283	15,207	706,380	305,145	32,525	68,729	120,145	2,895,196	47,504	75,228	
127,786	56,723	536,480	149,067	34,604	93,019	51,805	2,543,293	42,768	73,516	
122,330	77,760	487,297	62,039	36,861	90,186	51,538	2,375,129	41,407	75,982	
138,685	68,399	472,430	77,491	42,540	89,910	63,286	2,472,531	39,616	78,454	
133,845	55,406	437,272	92,638	55,524	81,535	68,361	2,414,758	44,548	77,054	
146,726	95,195	557,227	119,863	73,120	79,175	59,919	2,608,665	38,934	71,617	

* Including $4,000 from Ontario Government for House of Refuge, and $7,809 for good roads.
† Including $13,206 Government grant for good roads.
‡ Including $13,196 Government grant for good roads.
‖ Including $12,364 Government grant for good roads.
¶ Including $13,458 paid by McNab township re Clay Bank bridge—classified in township returns under "Roads and Bridges."
§ Government grant for good roads.

STATISTICS OF ONTARIO

Showing abstract statement of Receipts, Disbursements, Assets and Liabilities

County Municipalities.	Disbursements, 1907.—*Continued.*						
	Printing, advertising, postage and stationery.	Insurance, heating, lighting and care of buildings.	Law costs, (including salaries.)	Other expenses of municipal government.	Roads and bridges.	Grants to Municipalities for roads and bridges.	Buildings and other works.
	$	$	$	$	$	$	$
1. Brant	467	1,976	100	26	1,120	.....	533
2. Bruce	2,026	1,005	385	1,040	10,235	6,956	.....
3. Carleton	664	1,062	547	1,623	3,046	.....	449
4. Dufferin	763	431	588	106	2,108	.....	457
5. Elgin	472	1,870	1,188	725	20,373	279	.....
6. Essex	1,428	1,479	506	504	4,756	72	638
7. Frontenac	812	345	41	56	25,733	.....	.....
8. Grey	523	686	27	228	9,548	.....	1,713
9. Haldimand	560	1,588	259	113	8,184	.....	172
10. Haliburton	145	88	.....	81	30	.....	.....
11. Halton	425	735	421	148	.....	744	.....
12. Hastings	1,080	2,099	938	164	27,130	3,150	26,714
13. Huron	906	1,549	.....	405	22,485	.....	.....
14. Kent	756	1,537	328	708	166	3,130	248
15. Lambton	1,025	1,143	150	561	10,665	447	1,972
16. Lanark	763	909	440	101	2,668	17,598	1,274
17. Leeds and Grenville	920	1,265	3	639	399	.....	.....
18. Lennox & Addington	636	1,555	1,145	157	501	18,499	3,935
19. Lincoln	439	2,363	47	1,735	13,495	.....	.....
20. Middlesex	771	1,003	311	521	21,697	17,691	225
21. Norfolk	478	686	72	247	3,424	.....	.....
22. Northumberland & Dur.	977	799	252	1,393	995	30	29,467
23. Ontario	1,083	930	50	269	2,797	.....	180
24. Oxford	724	3,441	90	605	69,375	4,431	23,382
25. Peel	658	867	21	46	32,002	.....	2,062
26. Perth	319	961	171	568	41,365	14,745	.....
27. Peterborough	543	1,443	75	638	8,592	2,075	*11,218
28. Prescott and Russell	662	522	10	48	3,841	.....	44
29. Prince Edward	536	845	.....	745	3,125	.....	636
30. Renfrew	520	1,111	50	113	1,429	.....	888
31. Simcoe	2,325	1,805	40	467	6,035	46,011	.....
32. Stormont, Dun. & Glen.	562	674	15	163	7,260	.....	949
33. Victoria	1,526	1,270	2,055	780	11,317	.....	2,480
34. Waterloo	1,254	1,767	34	582	2,098	.....	7,001
35 Welland	242	1,527	33	254	1,042	150	.....
36. Wellington	606	75	801	814	22,056	4,632	2,506
37. Wentworth	497	650	233	525	42,479	.....	.....
38. York	1,262	2,047	500	749	15,775	.....	840
Totals :							
1907	30,355	46,108	11,929	18,677	459,316	140,640	119,983
1906	29,589	38,274	14,181	19,640	360,440	92,960	197,002
1905	27,181	48,126	12,181	26,717	293,927	80,045	74,617
1904	28,581	42,498	9,072	19,755	410,577	132,130	105,804
1903	25,335	46,860	7,689	27,735	300,908	105,007	62,197
1902	22,747	35,061	10,679	15,799	211,415	23,657	148,025
1901	25,273	41,361	6,785	26,716	181,634	19,873	34,938
1900	22,713	37,960	6,673	19,267	139,281	23,829	78,813
1899	22,583	37,274	6,644	19,714	144,762	20,620	78,667
1898	24,876	33,628	7,807	19,825	136,491	18,252	140,330

*House of Refuge.

COUNTY MUNICIPALITIES.—*Continued.*

of the County Municipalities for the year ending December 31st, 1907.—*Continued.*

Disbursements, 1007.—*Continued*

Support of the poor and other charities.	Administration of justice, gaol maintenance, etc.	Grants to schools and other payments on education.	Sinking Fund investments and deposits.	Other investments and special deposits.	Debentures redeemed (principal.)	Interest paid on debentures.	Refund of money borrowed for current expenses.	Interest or discount on loans and advances.	Non-resident taxes paid local municipalities.	No.
$	$	$	$	$	$	$	$	$	$	
842	8,389	11,531	.....	.....	548	68	.....	.....	124	1
5,947	9,509	26,829	.....	10,000	1,785	805	34,000	665	1,400	2
3,139	21,208	20,089	4,169	.....	.....	4,000	105,000	1,516	1,043	3
118	5,890	10,865	.....	.....	.....	.....	3,000	187	98	4
6,514	12,159	21,476	.....	.....	1,799	1,747	57,000	1,114	305	5
6,504	11,667	21,914	.....	.....	3,010	1,896	18,531	477	4,058	6
2,112	12,861	17,267	.....	.....	15,000	3,900	79,901	2,185	2,075	7
5,432	13,070	31,264	1,800	.....	8,000	1,400	.....	.....	601	8
37	10,309	16,775	.....	.....	.....	.....	4,978	623	105	9
10	801	9,084	.....	.....	.....	.....	800	.....	1,027	10
128	5,595	11,354	.....	.....	.....	.....	2,258	469	62	11
103	16,713	25,661	.....	.....	1,484	2,287	30,248	1,182	1,402	12
8,068	10,753	30,926	27,501	.....	.....	3,683	55,000	440	86	13
6,770	12,824	24,144	.....	.....	4,662	1,302	24,795	955	4,685	14
6,204	9,783	25,686	.....	.....	3,943	604	20,000	239	3,251	15
6,754	7,457	13,688	.....	4,439	2,600	1,951	18,853	470	638	16
6,667	9,369	23,521	2,244	.....	638	2,103	.....	79	610	17
915	6,563	12,500	.....	.....	8,700	2,733	.....	138	371	18
6,325	10,182	11,112	.....	.....	2,000	500	.....	414	354	19
12,142	23,267	28,932	41,231	.....	20,000	15,857	.....	206	85	20
4,959	7,433	14,036	.....	.....	.....	.....	.....	97	531	21
9,181	15,889	31,584	2,727	.....	1,070	3,950	14,000	807	.....	22
6,895	10,939	20,422	.....	.....	2,618	874	98,000	1,013	852	23
7,859	8,736	21,479	.....	.....	9,938	4,042	45,000	393	357	24
2,393	9,478	13,384	.....	.....	1,017	139	30,000	476	47	25
7,009	10,131	18,759	13,189	.....	1,108	5,340	31,000	419	151	26
4,748	9,272	11,539	1,818	133	4,666	3,501	.....	379	1,290	27
8,442	6,394	21,729	.....	.....	1,609	1,302	3,179	735	2,608	28
4,541	3,237	23,875	.....	.....	1,063	1,102	10,101	639	116	29
1,815	7,720	16,473	.....	.....	2,627	2,066	33,000	37	164	30
11,262	15,224	32,340	.....	.....	6,075	4,916	40,000	1,200	1,569	31
1,225	8,837	26,938	.....	.....	1,527	1,066	21,835	836	434	32
6,847	7,164	16,278	3,025	.....	.....	1,600	39,318	989	382	33
11,160	10,768	19,951	.....	.....	2,293	970	37,092	532	.....	34
6,055	12,642	13,542	.....	.....	.....	.....	.....	60	1,893	35
9,067	13,063	22,923	.....	.....	.....	.....	35,000	548	338	36
851	21,371	14,281	.....	85	3,661	3,635	12,029	988	612	37
7,648	19,880	27,676	.....	.....	2,412	3,319	13,887	739	396	38
196,688	416,547	761,827	97,704	14,657	115,853	82,658	917,805	22,246	34,120	
161,898	424,244	545,969	35,898	44,040	155,577	82,195	839,767	18,257	37,493	
148,082	414,732	417,076	55,528	36,320	109,608	77,717	835,035	19,544	30,889	
151,203	401,043	389,059	47,385	10,342	141,984	82,072	761,908	19,176	28,790	
129,636	390,259	386,065	39,853	12,000	150,528	78,047	613,402	13,890	46,584	
108,469	369,708	362,200	47,454	18,018	89,968	68,931	558,918	15,182	34,835	
111,322	441,876	359,746	31,824	24,998	109,737	73,396	473,612	13,656	40,847	
103,862	433,768	362,375	69,373	43,015	131,188	89,500	491,778	13,422	42,272	
102,511	434,721	363,949	46,941	31,000	103,706	72,022	444,459	15,390	70,386	
87,495	447,054	361,215	39,452	25,000	141,914	91,914	613,537	16,911	66,343	

STATISTICS OF ONTARIO

Showing abstract statement of Receipts, Disbursements, Assets and Liabilities

County Municipalities.	Disbursements, 1907.—*Concluded.*		Assets on December 31st, 1907.				
	Miscellaneous.	Total disbursements.	Cash in treasury.	Rates due from local municipalities.	Sinking Fund investments and deposits.	Other investments and special deposits.	Land, buildings, furniture, etc.
	$	$	$	$	$	$	$
1. Brant	794	28,648	14,895	.....	.....	.....	106,000
2. Bruce	3,193	121,033	6,793	1,749	.....	10,000	80,000
3. Carleton	2,523	173,485	504	22,810	40,343	.....	310,000
4. Dufferin	775	27,453	199	10,385	.....	.....	40,000
5. Elgin	1,322	132,262	5,677	30,529	.....	.....	178,000
6. Essex	1,835	82,812	79	26,284	.....	.....	111,000
7. Frontenac	481	168,771	117	25,456	.....	2,000	125,000
8. Grey	2,193	81,349	.....	2,364	6,000	45,035	120,618
8. Haldimand	2,609	48,984	35	1,763	.....	.....	43,761
10. Haliburton	50	12,993	.....	2,376	.....	.....	.....
11. Halton	1,039	25,159	224	530	.....	.....	43,500
12. Hastings	800	147,650	15	46,710	.....	.....	120,500
13. Huron	1,182	168,228	4,758	16,361	52,946	.....	112,000
14. Kent	1,364	92,877	879	32,910	.....	.....	187,530
15. Lambton	2,009	91,728	11,028	17,864	.....	.....	76,000
16. Lanark	1,187	85,156	3,981	.....	.....	4,439	93,775
17. Leeds and Grenville	708	53,353	10,639	4,829	34,277	.....	82,000
18. Lennox and Addington	400	61,145	1,373	20,866	.....	.....	59,500
19. Lincoln	562	52,165	9,132	8,150	.....	.....	106,500
20. Middlesex	6,464	197,198	8,967	56,173	117,474	22,800	100,000
21. Norfolk	229	34,571	6,764	620	.....	.....	59,000
22. Northumberland & Dur.	1,430	120,585	9,343	13,547	27,052	.....	134,700
23. Ontario	1,055	152,140	35,149	629	.....	.....	78,000
24. Oxford	337	205,234	.....	9,576	.....	.....	190,000
25. Peel	3,644	98,395	6,808	.....	.....	.....	80,886
26. Perth	838	149,120	7,368	2,525	18,643	.....	125,000
27. Peterborough	993	65,193	.....	6,071	16,663	133	125,255
28. Prescott and Russell	520	54,086	.....	24,703	.....	.....	44,173
29. Prince Edward	264	52,783	.....	.....	.....	.....	76,000
30. Renfrew	1,509	73,070	.....	18,929	.....	.....	53,000
31. Simcoe	634	178,098	114	67,359	.....	300	142,500
32. Stormont, Dun. & Glen.	658	76,561	55	29,010	.....	.....	61,000
33. Victoria	2,004	100,592	1,000	.....	5,599	*1,137	121,038
34. Waterloo	843	99,254	46	.....	.....	.....	90,000
35. Welland	435	40,045	4,264	958	.....	.....	94,593
36. Wellington	4,522	120,739	7,934	4,940	.....	.....	80,000
37. Wentworth	647	108,720	.....	9,543	.....	85	346,641
38. York	1,133	103,926	277	33,725	.....	.....	140,000
Totals:							
1907	53,185	3,685,561	158,417	550,244	318,997	85,929	4,137,470
1906	55,013	3,283,954	237,781	438,060	265,585	83,130	4,091,700
1905	48,882	2,883,596	231,836	579,976	275,864	79,110	3,787,982
1904	47,217	2,956,737	222,494	579,103	278,649	45,686	3,582,853
1903	44,274	2,603,001	292,195	527,890	254,663	74,804	3,547,297
1902	41,642	2,299,022	244,271	482,437	220,645	72,176	3,518,663
1901	47,042	2,185,025	190,104	610,246	245,972	38,100	3,296,654
1900	52,377	2,279,536	192,995	489,635	257,895	47,115	3,267,078
1899	57,211	2,194,462	220,596	533,868	234,921	34,400	3,228,327
1898	46,432	2,429,027	179,638	531,222	212,386	31,400	3,229,542

* Previously omitted.

COUNTY MUNICIPALITIES.—*Continued.*

of the County Municipalities for the year ending December 31st, 1907.—*Continued.*

Assets, 1907.—*Concluded.*		Liabilities on December 31, 1907.							
Miscellaneous.	Total assets.	School grants unpaid.	Railway debentures outstanding (principal.)	All other debentures outstanding (principal.)	Loans for current expenses and interest due on same.	Local municipalities for non-resident taxes.	Miscellaneous.	Total liabilities.	No.
$	$	$	$	$	$	$	$	$	
.....	120,895	.....	.....	1,163	.....	.....	216	1,379	1
3,939	102,481	.....	.....	41,193	.....	.....	2,911	44,104	2
.....	373,657	.....	.....	80,000	40,340	732	.....	121,072	3
666	51,250	1,450	.....	.....	6,000	162	1,235	8,847	4
22,490	236,696	.....	.....	43,447	38,000	741	11,100	93,288	5
3,463	140,826	.....	.....	44,380	14,231	2,394	1,586	62,591	6
3,900	156,473	.....	35,000	.....	80,812	.....	.....	115,812	7
820	174,837	61	.....	27,000	.....	247	*105,897	133,205	8
1,404	46,963	.....	.....	.....	7,584	.....	1,393	8,977	9
.....	2,376	392	.....	.....	161	.....	575	1,128	10
.....	44,254	.....	.....	.....	2,000	.....	.....	2,000	11
3,800	171,025	1,700	.....	44,276	58,284	.....	39	104,299	12
.....	186,065	.....	.....	93,000	.....	470	.....	93,470	13
8,236	229,555	185	.....	27,889	35,853	3,308	5,151	72,386	14
1,366	106,258	.....	.....	11,166	15,000	986	.....	27,152	15
3,355	105,550	.....	.....	69,100	.....	.....	.....	69,100	16
.....	131,745	1,350	.....	56,021	.....	255	450	58,076	17
632	82,371	6,862	.....	47,200	.....	.....	.....	54,062	18
3,086	126,868	.....	.....	8,000	12,000	381	600	20,981	19
2,980	308,394	.....	.....	486,260	.....	471	6,690	493,421	20
.....	66,384	.....	.....	.....	.....	.....	.....	.....	21
.....	184,642	863	.....	98,930	20,000	369	.....	120,162	22
.....	113,778	.....	.....	18,296	39,288	55	.....	57,639	23
†40,924	240,500	552	.....	141,119	6,088	19	3,706	151,484	24
2,371	90,065	.....	.....	31,681	.....	.....	1,315	32,996	25
2,458	155,994	.....	120,000	4,898	.....	29	.....	124,927	26
6,978	155,100	1,875	.....	89,696	11,482	103	3,972	107,128	27
19,811	88,687	3,160	.....	30,926	29,453	.....	206	63,745	28
551	76,551	265	.....	29,400	4,482	.....	116	34,263	29
1,596	73,525	95	.....	48,043	142	716	1,003	49,999	30
18,521	228,794	.....	.....	117,970	65,000	.....	9,092	192,062	31
‡40,991	131,056	.....	.....	25,118	18,355	.....	772	44,245	32
4,272	133,046	141	.....	40,000	13,074	214	576	54,005	33
7,375	97,421	.....	.....	23,440	5,766	.....	.....	29,206	34
35,767	135,582	1,304	.....	.....	.....	.....	.....	1,304	35
9,097	101,971	4,215	.....	.....	.....	208	12,235	16,658	36
17,511	373,780	.....	.....	92,433	18,870	.....	1,109	112,412	37
9,102	183,104	1,095	.....	86,095	18,232	213	17,480	123,115	38
277,462	5,528,519	25,565	155,000	1,958,140	560,497	12,073	189,425	2,900,700	
248,577	5,364,833	13,052	170,000	1,892,221	392,196	8,913	113,936	2,590,318	
212,175	5,167,243	8,351	199,400	1,795,798	448,335	8,567	101,847	2,562,298	
150,276	4,859,061	12,500	199,400	1,767,658	460,496	5,867	126,651	2,572,572	
105,769	4,802,618	11,453	212,900	1,671,109	385,307	6,537	99,347	2,386,653	
96,038	4,634,230	12,304	237,000	1,492,392	291,942	20,192	101,113	2,154,943	
138,035	4,519,111	9,854	237,000	1,433,293	306,713	7,308	54,675	2,048,843	
142,918	4,397,636	7,657	258,500	1,459,491	300,807	11,295	66,342	2,104,092	
128,168	4,380,280	11,585	305,000	1,466,688	320,585	11,027	89,429	2,204,314	
151,806	4,338,994	11,524	322,000	1,459,056	327,025	25,889	68,664	2,214,158	

* Debentures of minor municipalities guaranteed by the county.
† Including $39,287 advances to townships for roads.
‡ Including $37,370 advances to townships for roads, bridges, etc.

POPULATION, AREA, ASSESSMENT,

Municipalities.	Assessed population, 1908.	Area assessed.	Real property.		Assessed values.		
			Excluding buildings.	Buildings.	Real property.	Business assessment.	Income.
ALGOMA:	No.	Acres.	$	$	$	$	$
Day, etc.....Tp.	255	14,395	51,869	27,815	76,359	1,387	.....
Hilton..... "	415	26,972	65,356	40,960	98,816	3,380	.....
Jocelyn..... "	437	28,802	73,173	33,725	73,043	.....	.....
Johnson, etc..... "	1,004	39,064	149,883	65,005	205,608	2,075	100
Korah ..... "	663	31,084	363,909	48,051	404,620	.....	.....
Laird ..... "	424	19,704	108,425	9,360	112,835	200	.....
Macdonald, etc ... "	775	27,097	108,150	7,500	110,800	1,500	.....
Plummer Add'nl... "	180	16,066	76,025	21,574	96,599	.....	.....
Prince ..... "	213	21,457	71,255	13,700	84,285	.....	.....
St. Joseph ..... "	978	28,425	117,687	57,265	163,052	2,200	.....
Tarentorus, etc ... "	516	21,539	296,875	29,910	324,185	.....	.....
Thessalon..... "	533	19,582	82,456	13,820	95,831	750	.....
Thompson..... "	¶172	¶15,903	35,960	10,350	43,810	500	.....
Totals.... 1908	6,565	310,090	1,601,023	379,035	1,889,843	11,992	100
Totals.... 1907	6,463	308,417	.....	.....	1,877,188	14,128	300
Blind River.....Tn.	2,612	1,243	127,915	292,025	394,240	53,370	18,768
Bruce Mines ..... "	714	747	88,651	113,300	183,225	9,773	600
Sault Ste. Marie ... "	8,709	1,250	2,363,285	2,643,301	4,853,736	308,470	189,617
Steelton..... "	2,578	1,800	750,983	598,735	1,303,613	4,167	16,340
Thessalon..... "	1,536	507	124,541	280,710	388,462	76,146	800
Totals.... 1908	16,149	5,547	3,455,378	3,928,071	7,123,276	451,926	226,125
Totals.... 1907	14,723	4,972	.....	.....	6,800,785	388,560	179,912
BRANT:							
Brantford .....Tp.	5,692	71,576	2,754,999	1,631,995	4,315,794	69,750	19,600
Burford..... "	4,037	66,607	1,680,447	622,510	2,250,617	19,723	4,975
Dumfries, S ..... "	2,570	46,600	1,714,634	820,612	2,480,996	44,684	5,750
Oakland..... "	725	10,606	294,868	145,985	433,761	6,775	4,868
Onondaga..... "	961	20,539	624,935	163,290	766,025	1,890	1,300
Totals.... 1908	13,985	215,928	7,069,883	3,381,422	10,247,223	142,822	36,493
Totals.... 1907	13,697	216,177	.....	.....	10,193,764	138,590	33,113
Paris .. ..Tn 1908	3,998	760	272,492	1,057,650	1,182,922	194,025	111,711
Paris .. ..Tn 1907	3,860	760	.....	.....	1,135,372	178,540	98,373
*Brantford, City.. 1908	20,633	2,957	3,722,480	7,492,625	9,150,460	1,323,120	302,720
*Brantford, City.. 1907	19,899	2,541	.....	.....	8,964,595	1,212,403	275,118
BRUCE:							
Albemarle .....Tp.	1,013	56,643	278,025	116,955	383,480	2,000	.....
Amabel..... "	3,570	65 080	584,600	186,150	765,400	5,000	.....
Arran..... "	1,986	54,113	1,072,300	440,460	1,484,900	1,710	.....
Brant ..... "	3,466	69,395	2,016,534	531,900	2,501,834	12,625	.....
Bruce..... "	2,422	67,206	1,445,491	405,620	1,826,111	4,895	.....

‡ Lake Superior Power Co. pays $5,500 in lieu of taxes.

¶ Taken from 1907 assessment roll as 1908 has not been received.

* Municipalities so marked in this table are separated from the county for county purposes.

† Statistics so marked are estimated, the same being omitted from return and could not be obtained although several requests were made.

EXEMPTIONS AND TAXATION.

Total.	Assessed for schools only.	Exempt from taxes or liable for local improvement only.	Taxes imposed. Municipal.	School.	Total.	Total per head.	Mills on $.	Municipalities.
$	$	$	$	$	$	$ c.		Algoma :
77,746	.....	3,325	463	1,107	1,570	6 16	20.2	Day, etc.
102,196	.....	7,500	1,421	955	2,376	5 73	23.2	Hilton.
73,013	.....	33,855	536	1,334	1,870	4 28	25.6	Jocelyn.
207,783	160	9,280	1,576	2,787	4,363	4 35	21.0	Johnson, etc.
404,620	.....	7,340	3,150	1,244	4,394	6 63	10.9	Korah.
113,035	.....	4,950	629	1,208	1,837	4 33	16.3	Laird.
112,300	.....	4,850	2,098	2,497	4,595	5 93	40.9	Macdonald, etc.
96,599	.....	1,000	1,031	717	1,748	9 71	18.1	Plummer Add'nl.
84,285	.....	670	513	387	900	4 23	10.7	Prince.
165,252	.....	11,900	2,080	2,323	4,403	4 50	26.6	St. Joseph.
324,185	.....	2,600	4,095	2,269	6,364	12 33	19.6	Tarentorus, etc.
96,581	2,500	445	1,412	985	2,397	4 50	24.8	Thessalon.
44,310	.....	2,500	818	159	977	5 68	22.0	Thompson.
1,901,935	2,660	90,215	19,822	17,972	37,794	5 76	19.9	Totals.
1,891,616	400	.....	19,782	18,287	38,069	5 89	20.1	
466,378	.....	25,700	5,661	7,198	12,859	4 92	27.6	Blind River.
193,598	.....	18,729	1,633	2,323	3,956	5 54	20.4	Bruce Mines.
5,351,823	.....	152,850	75,100	38,288	‡113,388	13 02	21.2	Sault Ste. Marie.
1,324,120	.....	46,105	10,820	13,309	**24,129	9 36	18.2	Steelton.
465,108	108,160	16,789	6,560	4,189	10,749	7 00	23.1	Thessalon.
7,801,327	108,160	260,173	99,774	65,307	165,081	10 22	21.2	Totals.
7,369,257	44,160	.....	84,265	58,404	142,669	9 69	19.4	
								Brant :
4,405,144	.....	71,200	21,081	14,728	35,809	6 29	8.1	Brantford.
2,275,345	.....	52,340	15,536	11,162	26,698	6 61	11.7	Burford.
2,531,430	3,235	54,250	9,600	8,134	17,734	6 90	7.0	Dumfries, S.
445,404	.....	7,092	2,531	1,930	4,461	6 15	10.0	Oakland.
769,215	.....	22,200	4,508	3,023	7,531	7 84	9.8	Onondaga.
10,426,538	3,235	207,082	53,256	38,977	92,233	6 60	8.8	Totals.
10,365,767	... .	.....	49,998	38,897	88,895	6 49	8.6	
1,488,658	190,173	147,220	24,106	9,250	33,356	8 34	22 4	Paris.
1,412,285	148,798	.....	17,676	9,157	26,833	6 95	19.0	
11,076,300	687,855	1,764,645	198,917	67,999	266,916	12 94	24.1	*Brantford.
10,452,116	537,470	.....	183,590	62,605	246,195	12 37	23.6	
								Bruce :
385,480	... ...	11,500	2,770	2,526	5,296	5 08	13.7	Albemarle.
770,400	.....	5,350	5,841	6,960	12,801	3 59	16.6	Amabel.
1,486,610	.....	27,860	7,538	5,919	13,457	6 78	9.0	Arran.
2,514,459	.....	46,600	10,435	8,257	18,692	5 39	7.4	Brant.
1,831,006	.....	25,000	9,037	6,719	15,756	6 51	8.6	Bruce.

** Lake Superior Power Co. pays $5,000 in lieu of taxes.

Note.—The property assessed for schools only is included in the total assessment in previous column. The item of municipal taxes includes, beside the general rate, the county rates and local improvements.

POPULATION, AREA, ASSESSMENT,

Municipalities.	Assessed Population, 1908.	Area assessed.	Real property.		Assessed values.		
			Excluding buildings.	Buildings.	Real property.	Business assessment.	Income.
BRUCE.—*Con.*	No.	Acres.	$	$	$	$	$
Carrick.....Tp.	3,854	59,439	1,877,288	894,735	2,736,523	36,920	1,800
Culross ..... "	2,190	56,693	1,348,421	409,670	1,745,186	2,900	.....
Eastnor..... "	1,580	54,415	435,865	169,143	589,958	14,260	.....
Elderslie..... "	1,945	53,455	1,495,445	403,575	1,880,320	2,250	.....
Greenock..... "	2,505	64,953	1,363,222	479,650	1,832,282	15,465	4,000
Huron ..... "	2,982	58,095	1,834,150	779,773	2,576,323	17,941	1,200
Kincardine..... "	2,403	59,036	1,439,775	427,400	1,827,375	2,400	.....
Kinloss ..... "	1,850	46,188	1,262,690	307,600	1,553,420	4,300	900
Lindsay..... "	705	65,276	136,225	18,170	150,705	.....	.....
St. Edmunds..... "	381	60,220	16,337	26,290	70,227	1,514	.....
Saugeen..... "	1,382	36,757	708,711	302,805	1,002,316	1,000	.....
Totals.... 1908	34,264	926,964	17,345,079	5,899,896	22,926,260	125,180	7,900
Totals.... 1907	35,060	921,078	.....	.....	22,965,702	125,629	8,967
Hepworth.....Vill.	507	718	16,595	51,065	59,560	7,900	.....
Lucknow..... "	1,035	500	52,807	270,145	277,952	44,620	7,736
Paisley..... "	818	500	48,845	256,470	286,615	32,135	12,837
Port Elgin ..... "	1,420	640	66,095	319,740	367,935	25,553	7,050
Tara..... "	544	500	38,660	174,285	193,945	19,341	700
Teeswater..... "	887	474	60,220	220,850	241,020	27,795	1,408
Tiverton ..... "	596	477	27,625	83,520	85,795	8,179	1,100
Chesley.....Tn.	1,962	583	144,825	450,995	528,520	56,845	6,090
Kincardine ..... "	2,721	1,900	197,965	637,250	628,765	71,294	13,050
Southampton .... "	1,723	1,646	76,481	362,475	385,506	51,865	19,971
Walkerton..... "	3,010	1,350	520,960	403,225	677,185	91,930	20,890
Wiarton..... "	2,456	752	195,784	493,535	621,919	85,348	6,853
Totals.... 1908	17,479	10,040	1,446,862	3,724,555	4,354,717	522,805	97,685
Totals.... 1907	17,251	10,010	.....	.....	4,278,779	507,174	89,829
CARLETON:							
Fitzroy.....Tp.	2,226	60,682	1,226,812	216,150	1,418,137	4,000	.....
Gloucester..... "	7,011	85,801	1,242,233	631,399	1,810,272	10,350	.....
Goulbourn ..... "	2,357	64,462	929,199	138,960	1,044,659	4,175	.....
Gower, North ..... "	1,847	32,573	762,370	277,035	1,022,255	11,700	4,890
Huntley..... "	2,020	62,341	967,240	261,936	1,203,826	7,180	2,550
March ..... "	862	28,037	719,516	127,025	822,616	1,015	.....
Marlborough ..... "	1,327	57,088	428,050	167,605	579,955	4,080	380
Nepean..... "	4,092	56,934	1,830,975	860,065	2,508,690	20,350	5,450
Osgoode ..... "	4,143	91,320	1,109,520	470,935	1,545,355	18,845	.....
Torbolton..... "	842	25,883	109,610	44,620	138,130	.....	.....
Totals 1908	26,727	565,121	9,325,525	3,195,730	12,093,895	81,695	13,270
Totals 1907	27,645	563,966	.....	.....	11,994,223	105,045	21,145
Richmond..... 1908	111	1,447	31,975	45,575	71,550	6,300	300
Village 1907	432	1,450	.....	.....	71,460	7,400	250
Ottawa City ... 1908	80,284	‡5,119	18,489,164	37,891,623	37,978,762	4,236,695	2,151,555
Ottawa City ... 1907	74,891	4,089	.....	.....	36,505,912	4,026,295	1,968,530
DUFFERIN:							
Amaranth. .....Tp.	2,165	63,800	1,362,830	500,770	1,860,800	1,250	.....
Garafraxa, E..... "	1,681	40,867	941,613	218,600	1,140,093	600	.....
Luther, E..... "	1,563	38,713	831,533	365,500	1,184,908	2,700	.....

‡ Territory from adjacent municipalities annexed.

EXEMPTIONS AND TAXATION.—*Continued.*

Total.	Assessed for schools only.	Exempt from taxes or liable for local improvement only.	Taxes imposed. Municipal.	School.	Total.	Total per head.	Mills on $.	Municipalities.
$	$	$	$	$	$	$ c.		BRUCE.—*Con.*
2,775,243	.....	35,500	8,149	11,283	19,432	5 04	7.0	Carrick.
1,748,086	.....	12,905	6,627	6,661	13,288	6 07	7.6	Culross.
604,218	.....	15,050	4,409	4,118	8,527	5 40	14.1	Eastnor.
1,882,470	.....	18,800	7,159	6,397	13,556	6 97	7.2	Elderslie.
1,851,747	.....	10,590	8,386	6,803	15,189	6 06	8.2	Greenock.
2,595,464	.....	37,600	10,450	8,269	18,719	6 28	7.2	Huron.
1,829,775	.....	39,800	8,670	8,639	17,309	7 20	9.5	Kincardine.
1,558,620	.....	16,870	5,994	5,041	11,035	5 96	7.1	Kinloss.
150,705	.....	3,690	2,741	1,123	3,864	5 48	25.6	Lindsay.
71,741	.....	2,400	1,126	784	1,910	5 01	26.6	St. Edmunds.
1,003,316	.....	9,200	5,362	3,226	8,588	6 21	8.6	Saugeen.
23,059,340	.....	318,715	104,694	92,725	197,419	5 76	8.6	Totals.
23,100,298	.....	.....	100,025	98,058	198,083	5 65	8.6	
67,160	750	8,100	752	947	1,699	3 35	25.2	Hepworth.
330,308	.....	45,000	5,818	2,509	8,327	8 05	25.2	Lucknow.
331,587	.....	18,700	4,830	2,156	6,986	8 54	21.1	Paisley.
400,538	18,625	18,900	7,847	3,405	11,252	7 92	28.1	Port Elgin.
213,986	1,500	19,000	2,694	1,284	3,978	7 31	18.6	Tara.
270,223	.....	40,050	3,256	2,137	5,393	6 08	20.0	Teeswater.
95,074	.....	25,350	725	885	1,610	4 07	16.9	Tiverton.
591,455	33,300	67,300	7,587	5,777	13,364	6 81	22.6	Chesley.
713,109	46,040	206,450	10,815	7,755	18,570	6 82	26.0	Kincardine.
457,342	74,450	53,450	7,223	4,660	11,883	6 90	26.0	Southampton.
790,005	44,320	247,000	16,336	7,529	23,865	7 93	30.2	Walkerton.
714,120	30,980	67,400	14,777	7,234	22,011	8 96	30.8	Wiarton.
4,975,207	249,965	816,700	82,660	46,278	128,938	7 38	25.9	Totals.
4,875,782	256,075	.....	79,693	43,363	123,056	7 13	25 2	
								CARLETON:
1,422,137	.....	24,825	7,869	6,203	14,072	6 32	9.9	Fitzroy.
1,820,622	.....	†63,360	18,252	16,917	35,169	5 02	19.3	Gloucester.
1,048,834	.....	23,500	7,193	5,917	13,110	5 56	12.5	Goulbourn.
1,038,845	.....	17,150	5,200	5,325	10,525	5 70	10.1	Gower, North.
1,213,556	.....	25,350	6,760	6,266	13,026	6 45	10.7	Huntley.
823,631	.....	23,925	2,267	2,709	4,976	5 77	6.0	March.
584,415	.....	15,700	4,657	4,569	9,226	6 95	15.8	Marlborough.
2,534,490	.....	182,350	14,159	10,224	24,383	5 96	9.6	Nepean.
1,564,200	.....	35,100	23,113	12,979	36,092	8 71	23.1	Osgoode.
138,130	.....	16,100	2,243	2,243	4,486	5 33	32.5	Torbolton.
12,188,860	.....	427,360	91,713	73,352	165,065	6 18	13.5	Totals.
12,120,413	.....	.....	87,614	75,020	162,634	5 88	13.4	
78,150	.....	6,000	833	929	1,762	4 29	22.5	Richmond.
79,110	.....	.....	880	913	1,793	4 15	22.7	
44,367,012	.....	18,402,025	777,224	350,650	1,127,874	14 05	25.4	*Ottawa.
42,500,737	.....	.....	711,028	308,411	1,019,439	13 61	24.0	
								DUFFERIN:
1,862,050	.....	2,800	7,761	8,493	16,251	7 51	8.7	Amaranth.
1,140,693	.....	20,150	5,347	6,255	11,602	6 90	10.2	Garafraxa, E.
1,187,608	.....	12,125	6,257	5,870	12,127	7 76	10.2	Luther, E.

POPULATION, AREA, ASSESSMENT

Municipalities.	Assessed population, 1908.	Area assessed.	Real property.		Assessed values.		
			Excluding buildings.	Buildings.	Real property.	Business assessment.	Income.
DUFFERIN—*Con.*	No.	Acres.	$	$	$	$	$
Melancthon.....Tp.	3,194	74,729	1,324,868	457,900	1,745.518	9,425	.....
Mono..... "	2,835	69,118	1,816,050	484,550	2,280,350	3.950	.....
Mulmur ..... "	2,718	69,858	1,228,775	241,275	1,458,200	4,750	600
Totals 1908	14,156	357,085	7,505,699	2,268,595	9,669,869	22,675	600
Totals 1907	14,088	356,673	.....	.....	9,675,218	24,830	300
Grand Valley .... Vill.	801	262	70,555	163,780	218,135	23,450	4,034
Shelburne..... "	1,149	600	103,265	313,790	366,455	39,861	7.780
Orangeville.....Tn.	2,546	1,511	256,455	686,955	868,710	93,966	13,655
Totals 1908	4,496	2,373	430,275	1,164,525	1,453,300	157,277	25,469
Totals 1907	4,725	2,373	.....	.....	1,451,438	165,967	27,948
DUNDAS:							
Matilda .....Tp.	3,472	62,182	1,006,924	381,925	1,330,349	9,350	5,800
Mountain..... "	2,734	57,572	1,061,466	376,635	1,406,101	9,083	.....
Williamsburg ..... "	3,378	60,585	1,021,615	475,870	1,467,035	12,100	5,500
Winchester..... "	3,224	57,015	1,028,138	430,500	1,444,538	8,950	.....
Totals 1908	12,808	237,354	4,118,143	1,664,930	5,648,023	39,483	11,300
Totals 1907	12,918	237,057	.....	.....	5,577,998	33,677	14,750
Chesterville.....Vill.	893	500	43,970	161,200	172,220	20,730	4,169
Iroquois ..... "	953	1,141	108,650	289,100	302,250	19,420	8.480
Morrisburg..... "	1,616	1,400	141,800	412,425	515,625	50,850	44,240
Winchester ..... "	1,211	500	73,625	333,925	353,250	36,990	10,230
Totals 1908	4,673	3,541	368,045	1,196,650	1,343,345	127,990	67,119
Totals 1907	4,558	3,560	.....	.....	1,407.333	117,369	57,822
DURHAM:							
Cartwright.....Tp.	1,598	37,359	629,073	247,405	855,658	6,600	600
Cavan ..... "	2,247	63,209	1,164,355	437,995	1,564,550	1,550	.....
Clarke..... "	3,196	69,196	1,371,372	707,975	2,038,147	13,030	3,312
Darlington..... "	3,542	68,694	1,661,597	†752,680	2,366,938	7,800	3,915
Hope ..... "	2,680	63,785	1,553,103	663,805	2,191,458	1,860	5,100
Manvers..... "	2,692	69,728	568,660	346,805	887,620	6,110	1,950
Totals..... 1908	15,955	371,971	6,948,160	3,156,665	9,904,371	36,950	14,877
Totals..... 1907	16,227	370,745	.....	.....	9,906,891	38,622	15.013
Millbrook.....Vill.	850	392	39,575	165,180	185,155	19,776	600
Newcastle..... "	610	1,926	80,220	132,575	192,195	6,920	1,700
Bowmanville.....Tn.	2,694	2,982	271,950	830,605	1,017,155	106,135	43,064
Port Hope ..... "	4,692	1,070	353,572	1,445,364	1,630,136	199,585	53,239
Totals 1908	8,846	6,370	745,317	2,573,724	3,024,641	332,416	98,603
Totals 1907	8,527	6,358	.....	.....	2,999,011	336,630	106,865
ELGIN:							
Aldborough.....Tp.	3,215	74,712	1,583,805	298,715	1,861,020	1,990	150
Bayham ..... "	3,220	57,077	825,315	398,065	1,201,195	14,462	2,220
Dorchester, S..... "	1,531	30,567	1,193,555	524,800	1,708,655	5,800	500
Dunwich..... "	3,122	69,424	1,928,140	597,605	2,504,515	5,050	31,000
Malahide ..... "	3,350	62,383	1,865,581	741,160	2,573,211	6,470	3,300

EXEMPTIONS AND TAXATION.

Total.	Assessed for schools only.	Exempt from taxes or liable for local improvement only.	Taxes imposed. Municipal.	School.	Total.	Total per head.	Mills on $.	Municipalities.
$	$	$	$	$	$	$ c.		DUFFERIN—*Con.*
1,754,943	.....	37,250	10,797	8,792	19,589	6 13	11.2	Melancthon.
2,284,300	.....	20,250	8,136	8,705	16,841	5 94	7.4	Mono.
1,463,550	.....	11,850	8,123	9,242	17,365	6 39	11.9	Mulmur.
9,693,144	.....	104,425	46,421	47,357	93,778	6 62	9.7	Totals.
9,700,348	.....	.....	43,452	49,009	92,461	6 56	9.5	
245,619	.....	16,200	2,885	2,112	4,997	6 24	20.3	Grand Valley.
414,096	.....	50,600	6,157	3,753	9,910	8 62	23.9	Shelburne.
976,331	29,200	74,700	18,055	7,449	25,504	10 02	26.1	Orangeville.
1,636,046	29,200	141,500	27,097	13,314	40,411	8 99	24.7	Totals.
1,645,353	22,000	.....	26,561	13,226	39,787	8 42	24.2	
								DUNDAS:
1,345,499	.....	58,500	14,289	10,147	24,436	7 04	18.2	Matilda.
1,415,184	.....	32,000	16,676	10,489	27,165	9 94	19.2	Mountain.
1,484,635	.....	30,450	17,055	9,411	26,466	7 83	17 8	Williamsburg.
1,453,488	.....	14,100	17,852	10,614	28,466	8 83	19.6	Winchester.
5,698,806	.....	135,050	65,872	40,661	106,533	8 32	18.7	Totals.
5,626,425	.....	.....	62,130	43,426	105,556	8 17	18.8	
197,119	.....	32,950	2,791	3,029	5,820	6 52	29.5	Chesterville.
330,150	5,000	95,500	6,149	4,642	10,791	11 32	32.7	Iroquois.
610,715	700	38,600	12,350	7,107	19,457	12 04	31.9	Morrisburg.
400,470	.....	54,300	5,157	3,242	8,399	6 94	21.0	Winchester.
1,538,454	5,700	221,350	26,447	18,020	44,467	9 52	28.9	Totals.
1,582,524	5,700	.....	25,441	16,045	41,486	9 10	26.2	
								DURHAM:
862,858	.....	20,820	5,875	4,499	10,374	6 49	12.0	Cartwright.
1,566,100	.....	37,800	11,068	8,037	19,105	8 50	12.2	Cavan.
2,054,489	.....	41,200	10,024	10,316	20,340	6 36	9.9	Clarke.
2,378,653	.....	†47,339	12,014	10,786	22,800	6 44	9.6	Darlington.
2,198,418	.....	25,450	8,185	8,229	16,414	6 12	7.5	Hope.
895,680	.....	27,845	6,995	8,302	15,297	5 68	17.1	Manvers.
9,956,198	.....	200,454	54,161	50,169	104,330	6 54	10.5	Totals.
9,960,526	.....	.....	58,194	48,488	106,682	6 57	10.7	
205,531	.....	19,600	2,779	2,227	5,006	5 89	24.4	Millbrook.
200,815	.....	20,600	1,980	2,151	4,131	6 77	20.6	Newcastle.
1,166,354	81,040	85,400	18,874	7,050	25,924	9 62	22.2	Bowmanville.
1,882,960	142,000	168,800	37,079	10,950	48,029	10 24	25.5	Port Hope.
3,455,660	223,040	294,400	60,712	22,378	83,090	9 39	24.0	Totals.
3,442,506	208,040	.....	66,448	22,496	88,944	10 43	25.8	
								ELGIN:
1,863,160	.....	21,500	21,551	9,916	31,467	9 79	16.9	Aldborough.
1,217,877	.....	22,185	14,556	9,648	24,204	7 52	19.9	Bayham.
1,714,955	.....	9,700	11,980	4,856	16,836	11 00	9.8	Dorchester, S.
2,540,595	.....	21,200	19,455	7,731	27,186	8 71	10.7	Dunwich.
2,582,981	.....	33,530	20,284	9,143	29,427	8 78	11.4	Malahide.

POPULATION, AREA, ASSESSMENT,

Municipalities.	Assessed Population, 1908.	Area assessed.	Real property.		Assessed values.		
			Excluding buildings.	Buildings.	Real property.	Business assessment.	Income.
ELGIN.—*Con.*	No.	Acres.	$	$	$	$	$
Southwold .....Tp.	3,310	72,800	2,408,213	742,180	3,128,393	15,025	.....
Yarmouth ..... "	4,143	69,477	2,593,211	934,285	3,501,496	12,655	430
Totals.... 1908	21,891	436,440	12,397,820	4,236,810	16,478,515	61,452	37,600
1907	23,366	437,183	.....	.....	16,795,070	96,143	29,220
Dutton.....Vill	978	500	83,316	289,808	350,874	27,138	7,600
Port Stanley..... "	723	505	77,745	120,395	193,240	11,456	1,519
Rodney ..... "	786	453	45,375	131,355	163,430	13,200	1,815
Springfield ..... "	471	407	30,715	88,540	103,755	8,605	964
Vienna..... "	363	1,271	33,045	58,000	79,295	4,845	1,290
West Lorne ..... "	842	493	34,253	118,410	138,510	14,210	1,988
Aylmer .....Tn.	2,225	540	177,910	666,045	771,005	101,392	23,735
Totals.... 1908	6,388	4,169	482,359	1,472,553	1,800,109	180,846	38,911
1907	4,636	3,216	.....	.....	1,378,918	136,806	32,329
*St. Thomas, City.. 1908	14,164	1,800	2,293,120	4,737,530	5,888,750	438,070	127,863
1907	13,414	1,800	.....	.....	5,385,340	420,293	117,600
ESSEX:							
Anderdon .....Tp.	1,900	22,930	686,832	132,190	813,222	800	.....
Colchester, N ..... "	1,769	30,268	811,329	104,480	881,809	450	.....
Colchester, S..... "	2,624	34,370	818,697	325,778	1,107,707	11,150	4,610
Gosfield, N..... "	1,933	27,978	1,045,470	310,130	1,330,350	600	.....
Gosfield, S.. ..... "	2,299	29,858	1,051,187	348,520	1,383,107	3,750	5,650
Maidstone ..... "	2,754	44,419	1,537,010	266,861	1,763,871	4,925	.....
Malden ..... "	1,358	20,897	684,056	262,360	934,116	.....	1,200
Mersea..... "	3,831	59,333	1,795,742	637,810	2,374,352	6,125	880
Rochester..... "	2,064	32,312	1,216,772	287,690	1,476,412	10,688	350
Sandwich, E ..... "	3,061	18,704	775,791	261,604	975,195	22,275	.....
Sandwich, S..... "	1,548	23,486	671,522	166,305	819,892	1,320	.....
Sandwich, W ..... "	2,448	23,436	933,525	151,904	1,081,929	5,650	.....
Tilbury, N ..... "	1,976	26,486	883,060	128,198	989,758	2,825	150
Tilbury, W ..... "	1,735	22,152	†701,288	†177,399	876,497	10,295	10,340
Totals.... 1908	31,300	416,629	13,612,281	3,561,229	16,808,217	80,853	23,180
1907	30,822	417,197	.....	.....	16,710,050	83,227	25,195
Belle River.....Vill.	579	346	31,615	98,860	110,525	15,417	159
Amherstburg.....Tn.	2,378	358	†206,910	†462,500	608,560	41,665	18,115
Essex ..... "	1,301	700	155,298	352,609	462,307	50,392	5,799
Kingsville ..... "	1,691	392	124,489	365,070	427,109	28,600	2,435
Leamington ..... "	2,479	836	237,526	593,823	790,249	72,206	26,071
Sandwich ..... "	2,074	2,000	367,156	437,460	654,766	32,115	5,623
Totals.... 1908	10,502	4,632	1,122,994	2,310,322	3,053,516	240,395	58,202
1907	10,778	4,635	.....	.....	2,951,159	279,589	54,271
*Pelee Island, Township. 1908	686	9,854	213,387	121,463	326,290	5,197	.....
1907	610	.....	.....	.....	318,670	4,685	.....
*Walkerville, Town.. 1908	2,867	437	803,911	2,383,973	3,016,910	1,327,464	190,758
1907	2,751	437	.....	.....	2,640,084	1,305,220	162,190
*Windsor, City.. 1908	15,829	2,020	3,618,275	4,898,925	7,667,375	675,950	126,075
1907	15,417	2,020	.....	.....	7,409,880	645,375	129,025

EXEMPTIONS AND TAXATION.—*Continued.*

Total.	Assessed for schools only.	Exempt from taxes or liable for local improvement only.	Taxes imposed. Municipal.	School.	Total.	Total per head.	Mills on $.	Municipalities.
$	$	$	$	$	$	$ c.		ELGIN—*Con.*
3,143,418	.....	22,000	21,511	9,757	31,268	9 45	9.9	Southwold.
3,514,581	15,450	26,000	31,199	13,896	45,095	10 88	12.8	Yarmouth.
16,577,567	15,450	156,115	140,536	64,947	205,483	9 39	12.4	Totals.
16,920,433	.....	.....	186,507	69,221	215,728	9 23	12.7	
385,612	.....	22,250	5,045	1,842	6,887	7 04	17.9	Dutton.
206,215	2,500	4,900	2,777	1,567	4,344	6 01	21.1	Port Stanley.
178,445	.....	13,300	2,650	1,663	4,313	5 49	24.2	Rodney.
113,324	.....	15,500	2,146	774	2,920	6 20	25.8	Springfield.
85,430	.....	11,750	1,146	940	2,086	5 75	24.4	Vienna.
154,708	.....	14,153	2,632	1,112	3,744	4 45	24.2	West Lorne.
896,132	90,800	72,950	23,811	5,819	29,630	13 32	33.1	Aylmer.
2,019,866	93,300	154,803	40,207	13,717	53,924	8 44	26 7	Totals.
1,548,053	.....	.....	33,485	10,649	44,134	9 52	28 5	
6,454,683	209,700	1,141,900	112,263	46,634	158,897	11 22	24 6	*St Thomas.
5,923,233	206,500	.....	102,922	47,386	150,308	11 21	25.4	
								ESSEX:
814,022	.....	5,800	8,265	4,748	13,013	6 85	16.0	Anderdon.
882,259	.....	34,000	13,055	5,238	18,293	10 34	20.7	Colchester, N.
1,123,467	.....	36,768	18,984	6,161	25,148	9 58	22.4	Colchester, S.
1,330,950	32,300	25,250	18,229	4,147	22,376	11 58	16.8	Gosfield, N.
1,392,507	955	16,600	12,666	6,612	19,278	8 39	13.8	Gosfield, S.
1,768,796	.....	40,000	16,523	7,809	24,332	8 84	13.8	Maidstone.
935,316	.....	12,300	7,224	3,226	10,450	7 70	11 2	Malden.
2,381,357	.....	59,200	28,497	11,797	40,294	10 52	16.9	Mersea.
1,487,450	.....	28,050	16,039	4,039	20,078	9 73	13.5	Rochester.
997,470	.....	62,200	14,467	5,030	19,497	6 37	19.5	Sandwich, E.
821,212	.....	17,935	10,706	2,108	12,814	8 28	15.6	Sandwich, S.
1,087,579	26,375	3,500	11,821	6,676	18,497	7 56	17.0	Sandwich, W.
992,733	.....	21,500	10,824	5,030	15,854	8 02	16.0	Tilbury, N.
897,132	.....	2,190	11,211	5,006	16,217	9 35	18.1	Tilbury, W.
16,912,250	59,630	365,293	198,511	77,630	276,141	8 82	16.3	Totals.
16,818,472	41,788	.....	179,164	84,084	263,248	8 54	15.7	
126,101	16,288	19,950	1,366	444	1,810	3 13	14.4	Belle River.
668,340	10,625	†60,850	14,107	5,528	19,635	8 26	29.4	Amherstburg.
518,498	20,500	45,600	6,163	6,367	12,530	9 63	24.2	Essex.
458,144	6,000	62,450	9,954	3,437	13,391	7 92	29.2	Kingsville.
888,526	8,500	41,100	10,902	8,885	19,787	7 98	22.3	Leamington.
692,504	10,700	149,850	9,836	3,456	13,292	6 41	19.2	Sandwich.
3,352,113	72,613	379,800	52,328	28,117	80,445	7 66	24.0	Totals.
3,285,019	101,925	.....	54,925	27,068	81,993	7 61	25.0	
331,787	.....	8,560	11,818	2,323	14,141	20 61	42.6	*Pelee Island.
323,355	.....	.....	.....	.....	12,051	19 75	37.3	
4,535,132	.....	170,974	51,450	11,303	62,753	21 89	13.8	*Walkerville.
4,107,494	.....	.....	46,315	11,237	57,552	20 92	14.0	
8,469,400	117,925	849,825	160,496	67,586	228,082	14 41	26.9	*Windsor.
8,184,280	146,705	.....	143,887	16,642	190,529	12 36	23.3	

POPULATION, AREA, ASSESSMENT,

Municipalities.	Assessed population, 1908.	Area assessed.	Real property.		Assessed values.		
			Excluding buildings.	Buildings.	Real property.	Business assessment.	Income.
	No.	Acres.	$	$	$	$	$
FRONTENAC:							
Barrie ..... Tp.	515	25,869	†43,040	†23,555	64,970	200	.....
Bedford ..... "	1,284	64,939	197,574	116,855	297,779	.....	3,100
Clarendon and M.. "	769	47,140	53,169	27,898	76,547	624	.....
Hinchinbrooke .... "	1,233	64,482	171,815	46,805	214,420	3,000	.....
Howe Island ..... "	312	8,196	60,343	22,093	80,436	.....	.....
Kennebec ..... "	1,078	44,880	67,239	44,680	104,819	2,515	.....
Kingston ..... "	2,606	52,306	866,519	440,565	1,269,249	7,055	.....
Loughborough .... "	1,845	51,871	241,215	165,535	401,080	2,975	5,700
Olden ..... "	1,091	51,600	155,621	79,700	228,191	2,680	.....
Oso ..... "	1,186	42,629	72,188	52,878	113,266	1,237	.....
Palmerston, etc.... "	873	55,595	51,210	41,405	88,580	2,600	.....
Pittsburg ..... "	2,000	47,901	544,168	271,789	814,157	.....	.....
Portland ..... "	2,044	53,202	638,699	267,020	895,719	2,925	1,100
Storrington..... "	1,718	56,242	300,158	121,926	418,084	6,268	.....
Wolfe Island ..... "	1,550	30,925	440,865	162,988	585,353	2,000	.....
Totals.... 1908	20,104	697,777	3,903,823	1,885,692	5,652,650	34,079	9,900
Totals.... 1907	19,577	694,672	.....	.....	5,712,258	43,204	3,700
Garden Island.... Vill.	181	77	13,100	16,500	27,600	10,000	12,500
Portsmouth ..... "	687	142	56,490	2,102,750	102,890	7,446	5,500
Totals.... 1908	868	219	69,590	2,119,250	130,490	17,446	18,000
Totals.... 1907	808	165	.....	.....	133,565	15,442	14,500
*Kingston, City.. 1908	19,438	2,300	3,191,311	7,370,660	7,146,071	815,880	300,935
*Kingston, City.. 1907	18,626	2,300	.....	.....	6,836,455	809,315	291,470
GLENGARRY:							
Charlottenburg ....Tp.	4,535	81,248	1,119,920	1,187,980	2,204,350	24,890	600
Kenyon ..... "	3,804	76,539	1,131,910	333,745	1,440,755	18,861	835
Lancaster ..... "	3,311	57,111	1,713,171	663,245	2,306,416	10,606	13,438
Lochiel ..... "	3,958	71,154	1,268,188	352,555	1,586,743	13,329	.....
Totals.... 1908	15,608	286,052	5,233,189	2,537,525	7,538,264	67,686	14,873
Totals.... 1907	16,608	287,817	.....	.....	7,153,367	47,581	15,110
Lancaster .....Vill.	576	130	19,380	136,335	143,415	11,135	487
Maxville ..... "	845	500	58,630	163,045	210,875	15,670	1,900
Alexandria.....Tn.	2,232	490	106,630	374,840	414,170	24,493	4,275
Totals.... 1908	3,653	1,120	184,640	674,220	768,460	51,298	6,662
Totals.... 1907	3,843	1,120	.....	.....	784,869	76,387	11,128
GRENVILLE:							
Augusta .....Tp.	3,241	74,666	879,710	475,904	1,292,289	21,500	1,200
Edwardsburg ..... "	3,221	70,322	936,512	277,830	1,194,242	5,700	4,387
Gower S..... "	644	21,689	239,447	84,795	316,467	.....	.....
Oxford-on-Rideau. "	2,409	59,375	605,613	293,373	807,186	2,031	1,775
Wolford..... "	1,262	46,589	640,745	317,440	931,260	.....	.....
Totals.... 1908	10,777	272,641	3,302,027	1,449,342	4,541,444	29,231	7,362
Totals.... 1907	11,196	272,461	.....	.....	4,599,630	28,441	7,282

EXEMPTIONS AND TAXATION.—*Continued*

Total.	Assessed for schools only.	Exempt from taxes or liable for local improvement only.	Taxes imposed. Municipal.	School.	Total.	Total per head.	Mills on $.	Municipalities.
$	$	$	$	$	$	$ c.		FRONTENAC:
65,170	.....	†1,625	384	783	1,167	2 27	17.9	Barrie.
300,879	.....	16,650	2,633	2,966	5,599	4 36	18.6	Bedford.
77,171	.....	4,520	569	1,300	1,869	2 43	24.2	Clarendon & M.
217,420	.....	4,200	2,423	2,448	4,871	3 95	22.4	Hinchinbrooke.
80,436	.....	†2,000	1,026	739	1,765	5 66	21.9	Howe Island.
107,334	.....	7,100	1,168	2,092	3,275	3 04	30.5	Kennebec.
1,276,304	.....	37,835	14,623	6,808	21,431	8 22	16.8	Kingston.
409,755	.....	5,670	5,787	4,528	10,315	5 59	25.2	Loughborough.
230,871	1,000	7,130	1,957	2,469	4,426	4 06	19.2	Olden.
114,503	.....	11,800	1,479	1,801	3,280	2 77	28.6	Oso.
91,180	.... ..	4,035	988	1,221	2,209	2 53	24.2	Palmerston, etc.
814,157	.....	1,800	9,788	6,220	16,008	8 00	19.7	Pittsburg.
899,744	.....	10,000	9,897	5,006	14,903	7 29	16.6	Portland.
424,352	.....	4,000	8,191	4,329	12,520	7 29	29.5	Storrington.
587,353	.....	18,500	7,319	4,328	11,647	7 51	19.8	Wolfe Island.
5,696,629	1,000	136,865	68,247	47,038	115,285	5 73	20.2	Totals.
5,759,162	1,600	.....	58,290	50,315	108,605	5 55	18.9	
50,100	.....	2,000	751	877	1,628	8 99	32.5	Garden Island.
115,836	2,800	2,056,350	1,458	1,003	2,461	3 58	21.2	Portsmouth.
165,936	2,800	2,058,350	2,209	1,880	4,089	4 71	24.6	Totals.
163,507	2,800	.....	2,139	1,885	4,024	4 98	24.6	
8,262,886	609,055	3,415,900	144,553	41,315	185,868	9 56	22.5	*Kingston,
7,937,240	471,480	.....	135,812	37,941	173,753	9 33	21.9	
								GLENGARRY:
2,229,840	.....	103,550	14,117	10,717	24,834	5 48	11.1	Charlottenburg.
1,460,451	.....	24,900	12,430	9,428	21,858	5 75	15.0	Kenyon.
2,330,460	.....	†70,000	8,156	10,230	18,386	5 55	7.9	Lancaster.
1,600,072	.....	34,000	7,820	10,981	18,801	4 75	11.8	Lochiel.
7,620,823	.....	232,450	42,523	41,356	83,879	5 37	11.0	Totals.
7,216,058	.....	.....	42,925	43,760	86,685	5 22	12.0	
155,037	.....	12,300	1,328	1,163	2,491	4 32	16.1	Lancaster.
228,445	.....	10,800	1,291	1,855	3,146	3 72	13.8	Maxville.
442,938	.....	67,300	9,849	3,848	13,697	6 14	30.9	Alexandria.
826,420	.....	90,400	12,468	6,866	19,334	5 29	23.4	Totals.
872,384	.....	.....	14,115	6,761	20,876	5 43	23.9	
								GRENVILLE:
1,314,989	.....	63,325	9,159	9,407	18,566	5 73	14.1	Augusta.
1,204,329	.....	20,100	8,451	10,598	19,049	5 91	15.8	Edwardsburg.
316,467	.....	7,775	2,426	2,133	4,559	7 08	14.4	Gower S.
810,992	.....	91,800	5,823	6,256	12,079	5 01	14.9	Oxford-on-Rideau.
931,260	.....	26,925	3,836	5,274	9,110	7 22	9.8	Wolford.
4,578,037	.....	209,925	29,695	33,668	63,363	5 88	13.8	Totals.
4,635,353	.....	.....	29,837	35,169	65,006	5 82	14.0	

POPULATION, AREA, ASSESSMENT.

Municipalities.	Assessed population, 1908.	Area assessed.	Real property.		Assessed values.		
			Excluding buildings.	Buildings.	Real property.	Business assessment.	Income
GRENVILLE—*Con.*	No.	Acres.	$	$	$	$	$
Cardinal.....Vill.	1,192	450	67,200	268,610	327,210	42,385	9,435
Kemptville..... "	1,199	359	92,600	362,425	389,925	26,985	5,600
Merrickville..... "	1,007	660	60,560	265,265	279,775	26,065	29,090
Totals.... 1908	3,398	1,469	220,360	896,300	996,910	95,435	44.125
1907	3,355	1,483	.....	.....	1,005,023	90,788	47,506
*Prescott, Town.... 1908	3,108	1,182	270,405	936,275	959,680	139,345	60,378
1907	2,960	1,182	.....	.....	950,930	138,280	44,447
GREY:							
Artemesia.....Tp.	2,948	68,334	866,762	385,070	1,203,832	19,030	.....
Bentinck ... . "	2,748	75,016	1,122,917	395,019	1,495,661	7,200	.....
Collingwood..... "	3,240	68,000	877,847	523,190	1,380,692	14,150	.....
Derby..... "	1,822	41,321	630,497	361,035	964,032	4,658	.....
Egremont..... "	2,858	72,449	1,494,843	474,715	1,942,758	10,898	2,410
Euphrasia..... "	2,680	71,750	948,615	395,015	1,310,280	4,600	600
Glenelg..... "	2,261	67,610	605,213	156,990	744,429	1,950	.....
Holland..... "	‡2,307	‡67,943	†919,471	†415,491	‡1,308,790	‡17,250	.....
Keppel..... "	3,540	93,720	569,595	224,880	736,225	30,700	.....
Normanby ..... "	3,388	67,664	1,494,780	577,650	2,052,255	17,775	1,000
Osprey..... "	2,740	70,752	786,155	253,890	1,019,745	5,250	.....
Proton ..... "	3,176	81,826	1,135,760	355,890	1,466,650	1,350	.....
St. Vincent..... "	2,590	63,366	906,865	475,900	1,363,695	.....	.....
Sarawak ..... "	1,529	10,665	150,002	194,965	338,267	22,811	.....
Sullivan ..... "	2,676	73,680	1,252,070	403,800	1,633,670	3,375	.....
Sydenham..... "	3,104	75,011	1,263,275	583,275	1,817,350	4,150	300
Totals.... 1908	43,607	1,069,107	15,024,697	6,176,778	20,778,331	165,177	4,310
1907	44,306	1,065,571	.....	.....	20,828,248	151,713	4,235
Chatsworth.....Vill.	366	128	33,145	100,220	116,215	7,630	2,716
Dundalk ..... "	758	450	64,529	201,335	235,414	26,003	595
Markdale..... "	970	950	99,658	244,322	277,780	32,928	3,864
Newstadt..... "	522	669	30,700	78,300	100,800	14,875	300
Durham .....Tn.	1,747	950	137,340	559,567	662,682	174,013	15,945
Hanover .... "	2,250	520	112,925	356,175	442,100	36,899	13,200
Meaford..... "	2,546	1,500	357,598	657,931	925,629	117,357	13,185
Owen Sound..... "	10,752	4,248	1,961,000	3,090,005	4,276,240	508,238	83,878
Thornbury..... ,,	632	900	89,246	194,035	270,406	26,333	1,575
Totals.... 1908	20,543	10,315	2,886,141	5,481,890	7,307,266	944,276	135,258
1907	20,509	10,315	.....	.....	7,120,901	916,978	132,104
HALDIMAND:							
Canborough .....Tp.	870	21,597	381,225	139,495	509,395	3,640	730
Cayuga N..... "	1,476	32,885	650,366	309,835	934,601	3,985	2,625
Cayuga S..... "	664	13,273	279,295	141,030	406,325	300	190
Dunn..... "	780	14,786	369,405	76,670	440,925	1,960	.....
Moulton..... "	1,763	27,328	482,950	162,400	637,000	700	.....
Oneida..... "	1,260	32,610	679,305	368,669	1,038,074	4,350	1,150
Rainham..... "	1,729	25,528	498,795	278,535	768,780	5,220	.....
Seneca..... "	1,633	41,784	851,525	387,385	1,212,910	3,005	1,500
Sherbrooke..... "	336	4,666	118,321	45,495	162,021	780	.....
Walpole..... "	3,659	66,967	1,525,570	599,040	2,081,010	18,445	6,895
Totals.... 1908	14,170	281,424	5,836,757	2,508,554	8,191,041	42,385	13,000
1907	13,985	280,038	.....	.....	8,181,427	50,196	14,075

‡ Taken from 1907 assessment roll, as 1908 has not been received.

EXEMPTIONS AND TAXATION.—*Continued.*

Total.	Assessed for schools only.	Exempt from taxes or liable for local improvement only.	Taxes imposed: Municipal.	Taxes imposed: School.	Taxes imposed: Total.	Total per head.	Mills on $.	Municipalities.
$	$	$	$	$	$	$ c.		GRENVILLE—*Con.*
379,030	60,000	8,600	3,041	2,310	5,351	4 49	14.1	Cardinal.
422,510	.....	65,100	5,735	4,500	10,235	8 54	24.2	Kemptville.
334,930	.....	46,050	4,427	2,345	6,772	6 72	20.2	Merrickville.
1,136,470	60,000	119,750	13,203	9,155	22,358	6 58	19.7	Totals.
1,143,317	75,000	.....	12,805	9,207	22,012	6.56	19.3	
1,159,403	.....	247,000	19,242	11,049	30,291	9 75	26.1	*Prescott.
1,133,657	.....	.....	17,849	10,656	28,505	9 63	25.1	
								GREY:
1,222,862	.....	48,000	8,048	10,986	19,034	6 46	15.6	Artemesia.
1,502,861	.....	22,275	7,015	6,682	13,697	4 98	9.1	Bentinck.
1,394,842	.....	20,345	9,326	9,234	18,560	5 73	13.3	Collingwood.
968,690	.....	27,500	7,971	4,403	12,374	6 79	12.8	Derby.
1,956,066	.....	26,800	7,921	7,650	15,571	5 45	8.0	Egremont.
1,315,480	.....	33,350	6,717	8,640	15,357	5 73	11.7	Euphrasia.
746,379	.....	17,774	4,638	5,609	10,247	4 53	13.7	Glenelg.
‡1,326,040	.....	†26,175	‡5,114	‡6,935	‡12,049	5 22	9.1	Holland.
766,925	.....	58,250	8,329	8,046	16,375	4 63	21.4	Keppel.
2,071,030	.....	20,175	8,299	9,316	17,615	5 20	8.5	Normanby.
1,024,995	.....	20,300	6,910	8,121	15,031	5 49	14.7	Osprey.
1,468,000	.....	25,000	7,348	8,666	16,014	5 04	10.9	Proton.
1,363,695	.....	19,070	15,069	3,606	18,675	7 21	43.7	St. Vincent.
361,108	25,408	†6,700	3,191	3,533	6,724	4 40	18.6	Sarawak.
1,637,045	.....	22,200	5,267	8,044	13,311	4 97	8.1	Sullivan.
1,821,800	.....	29,200	12,206	8,655	20,861	6 72	11.5	Sydenham.
20,947,818	25,408	423,114	123,369	118,126	241,495	5 54	11.5	Totals.
20,984,196	27,008	.....	124,519	132,977	257,496	5 81	12.3	
126,561	.....	17,150	1,076	1,000	2,076	5 67	16.4	Chatsworth.
262,012	.....	30,450	3,903	2,726	6,629	8 75	25.3	Dundalk.
314,572	.....	66,200	3,465	2,454	5,919	6 10	18.8	Markdale.
115,975	.....	8,200	954	1,009	1,963	3 76	16.9	Newstadt.
852,640	171,075	34,225	8,028	3,953	11,981	6 86	14.1	Durham.
492,199	10,000	27,000	8,349	4,682	13,031	5 79	26.5	Hanover.
1,056,171	183,450	89,900	19,287	9,509	28,796	11 31	27.3	Meaford.
4,868,356	178,200	774,765	88,516	36,502	125,018	11 63	25.7	Owen Sound.
298,314	.....	12,875	3,880	1,790	5,670	8 97	19.0	Thornbury.
8,386,800	542,725	1,060,765	137,458	63,625	201,083	9 79	24.0	Totals.
8,169,983	526,185	.....	138,512	62,897	201,409	9 82	24.7	
								HALDIMAND:
513,765	.....	11,325	3,647	2,312	5,959	6 85	11.6	Canborough.
941,211	.....	25,600	4,602	4,400	9,002	6 10	9.6	Cayuga N.
406,725	10,000	14,000	3,133	776	3,909	5 89	9 6	Cayuga S.
442,885	.....	5,150	2,341	2,297	4,638	5 95	10.5	Dunn.
637,700	.....	8,350	3,195	3,319	6,514	3 69	10.2	Moulton.
1,043,574	.....	9,900	5,353	5,373	10,726	8 51	10.3	Oneida.
774,000	.....	8,550	5,662	3,360	9,022	5 22	11.7	Rainham.
1,217,415	.....	26,000	6,917	5,278	12,225	7 49	10.0	Seneca.
162,801	.....	1,795	1,316	902	2,218	6 60	13.6	Sherbrooke.
2,106,350	.....	43,600	17,886	11,673	29,559	8 08	14.0	Walpole.
8,246,426	10,000	154,270	54,082	39,690	93,772	6 62	11.4	Totals.
8,215,698	.....	.....	49,826	42,167	91,993	6 58	11.2	

POPULATION, AREA, ASSESSMENT,

Municipalities.	Assessed population, 1908.	Area assessed.	Real property.		Assessed values.		
			Excluding buildings.	Buildings.	Real property.	Business assessment.	Income.
HALDIMAND—*Continued.*	No.	Acres.	$	$	$	$	$
Caledonia.....Vill.	835	547	45,507	228,443	236,950	21,464	1,541
Cayuga..... "	737	996	39,300	216,921	214,821	20,669	4,487
Hagersville..... "	1,077	349	64,680	200,135	236,715	37,285	1,000
Dunnville.....Tn.	2,833	938	314,025	609,675	893,725	108,225	11,325
Totals.... 1908	5,482	2,830	493,512	1,255,174	1,582,211	187,643	18,353
Totals.... 1907	5,254	2,777	.....	.....	1,503,124	162,865	20,458
HALIBURTON:							
Anson and Hindon Tp.	295	12,856	18,930	16,190	33,720	1,475	200
Cardiff..... "	531	24,684	44,630	10,093	52,378	400	.....
Dysart, etc..... "	985	363,606	†653,581	68,940	716,521	9,340	41
Glamorgan.. ..... "	528	19,469	†24,022	†9,654	‡31,776	‡1,610	.....
Lutterworth..... "	407	24,879	32,240	9,482	38,142	100	.....
Minden..... "	1,128	37,573	†66,403	†24,583	88,331	2,600	700
Monmouth..... "	595	29,220	79,100	24,683	97,503	967	.....
Sherborne, etc .... "	285	17,273	27,656	39,285	63,741	2,775	.....
Snowdon ..... "	683	35,222	†52,113	†13,824	62,205	.....	.....
Stanhope ..... "	457	17,924	29,859	16,506	42,315	1,700	.....
Totals.... 1908	5,894	582,706	1,028,534	233,240	1,226,632	20,967	941
Totals.... 1907	5,898	581,091	.....	.....	794,987	29,858	995
HALTON:							
Esquesing.....Tp.	3,475	65,805	1,469,273	721,041	2,149,764	35,449	4,550
Nassagaweya..... "	2,104	44,785	971,025	517,720	1,448,115	18,100	7,550
Nelson ..... "	2,691	46,179	1,671,222	517,425	2,169,647	100	500
Trafalgar..... "	3,473	67,059	2,272,514	381,085	2,630,449	2,600	2,300
Totals.... 1908	11,743	223,828	6,381,034	2,137,271	8,397,975	56,249	14,900
Totals.... 1907	11,683	223,469	.....	.....	8,421,896	54,378	20,550
Acton.....Vill.	1,522	429	92,490	358,795	380,785	37,541	1,500
Burlington ..... "	1 391	490	167,920	358,335	475,355	26,900	3,400
Georgetown..... "	1,511	1,050	106,105	348,990	382,495	39,149	11,176
Milton.....Tn.	1,624	400	103,450	450,255	416,145	40,869	6,800
Oakville ..... "	2,002	1,303	346,470	634,300	811,390	62,450	15,220
Totals.... 1908	8,050	3,672	816,415	2,150,675	2,466,170	206,909	38,096
Totals.... 1907	7,977	3,743	.....	.....	2,349,072	173,384	37,149
HASTINGS:							
Bangor W. & McC. Tp.	1,099	41,385	41,965	31,000	68,565	850	.....
Carlow..... "	645	26,887	39,083	38,405	72,388	500	.....
Dungannon..... "	704	35,727	59,063	33,738	85,949	582	.....
Elzevir and G..... "	1,435	62,339	†216,130	†114,144	305,174	3,500	.....
Faraday ..... "	871	51,498	62,085	18,435	77,845	250	.....
Hungerford..... "	3,418	90,579	1,122,796	493,875	1,598,971	43,485	.....
Huntingdon..... "	2,078	54,049	645,570	236,200	868,095	.....	.....
Limerick..... "	478	45,358	53,528	10,850	60,878	.....	.....
Madoc..... ..... "	2,382	65,203	667,271	231,400	813,821	4,300	.....
Marmora and L... "	1,658	109,548	483,316	113,360	586,751	1,595	.....
Mayo..... "	553	22,799	22,172	13,374	33,346	500	.....
Monteagle and H.. "	1,699	67,130	70,770	36,690	94,860	.....	100
Rawdon .... "	2,878	66,243	962,793	264,488	1,220,956	4,515	1,400

* Taken from 1907 assessment roll, as 1908 has not been received.

EXEMPTIONS AND TAXATION.—*Continued.*

Total.	Assessed for schools only.	Exempt from taxes or liable for local improvement only.	Taxes imposed.			Total per head.	Mills on $.	Municipalities.
			Municipal.	School.	Total.			
$	$	$	$	$	$	$ c.		HALDIMAND—*Con.*
259,955	.....	37,000	3,277	2,800	6,077	7 28	23.4	Caledonia.
239,977	3,809	41,400	3,530	2,950	6,480	8 79	27.0	Cayuga.
275,000	.....	28,100	2,934	2,613	5,547	5 15	20.2	Hagersville.
1,013,275	22,875	59,975	13,515	6,395	19,910	7 03	19.6	Dunnville.
1,788,207	26,684	166,475	23,256	14,758	38,014	6 93	21.3	Totals.
1,686,447	28,445	.....	22,296	13,532	35,828	6 82	21.2	
								HALIBURTON:
35,395	.....	1,400	331	824	1,155	3 92	32.6	Anson & Hindon.
52,778	.....	2,345	732	1,335	2,067	3 89	39.2	Cardiff.
725,902	.....	†6,000	6,021	3,027	9,048	9 19	12.5	Dysart, etc.
‡33,386	.....	†1,900	‡754	‡944	‡1,698	3 22	50.9	Glamorgan.
38,242	160	3,580	641	946	1,587	3 90	41.5	Lutterworth.
91,631	.....	2,655	1,341	2,072	3,413	3 03	37.2	Minden.
98,470	.....	6,280	787	1,654	2,441	4 10	24.8	Monmouth.
66,516	.....	3,200	913	481	1,394	4 89	21.0	Sherborne, etc.
62,205	.....	†3,732	988	1,306	2,294	3 36	36.9	Snowdon.
44,015	.....	4,050	534	1,174	1,708	3 74	38.8	Stanhope.
1,248,540	160	35,142	13,042	13,763	26,805	4 55	21.5	Totals.
825,840	.....	.....	11,043	12,673	23,716	4 02	28.7	
								HALTON:
2,189,763	.....	40,550	14,378	7,880	22,258	6 41	10.2	Esquesing.
1,473,765	.....	40,630	5,643	5,053	10,696	5 08	7.3	Nassagaweya.
2 170,247	.....	19,000	17,358	2,029	19,387	7 20	8.9	Nelson.
2,635,349	.....	23,150	19,623	7,360	26,983	7 77	10.2	Trafalgar.
8,469,124	.....	123,330	57,002	22,322	79,324	6 75	9.4	Totals.
8,496,824	.....	.....	45,806	29,507	75,313	6 45	8.9	
419,826	.....	70,500	4,969	3,250	8,219	5 40	19.6	Acton.
505,655	.....	50,900	4,590	3,500	8,090	5 82	16.0	Burlington.
432,820	5,000	72,600	5,246	5,194	10,440	6 91	24.1	Georgetown.
463,814	4,800	137,510	10,350	1,162	11,512	7 09	24.8	Milton
889,060	.....	169,380	14,795	6,916	21,711	10 84	24.4	Oakville.
2,711,175	9,800	500,920	39,950	20,022	59,972	7 45	22.1	Totals.
2,559,605	9,800	.....	38,220	19,484	57,704	7 23	22.5	
								HASTINGS:
69,415	.....	4,400	1,411	1,792	3,203	2 91	46.1	Bangor, W. & McC.
72,888	.....	5,100	834	1,371	2,205	3 42	30.3	Carlow.
86,531	.....	6,852	684	1,970	2,654	3 77	30.7	Dungannon.
308,674	.....	25,100	2,264	3,300	5,564	3 88	18.0	Elzevir & G.
78,095	.....	2,675	1,097	1,860	2,957	3 39	37.9	Faraday.
1,642,456	.....	17,700	11,711	9,166	20,877	6 11	12.7	Hungerford.
868,095	.....	13,675	5,935	5,381	11,316	5 45	13.0	Huntingdon.
60,878	.....	3,500	688	768	1,456	3 05	23.9	Limerick.
848,121	.....	54,850	9,899	7,206	17,105	7 18	20.2	Madoc.
588,346	.....	9,925	4,660	3,834	8,494	5 12	14.4	Marmora & L.
33,846	.....	2,200	636	1,270	1,906	3 45	56.3	Mayo.
94,960	.....	12,600	1,932	3,000	4,932	2 90	51.9	Monteagle & H.
1,226,871	.....	6,325	11,226	9,751	20,977	7 29	17.1	Rawdon.

POPULATION, AREA, ASSESSMENT,

Municipalities.	Assessed population, 1908.	Area assessed.	Real property.		Assessed values.		
			Excluding buildings.	Buildings.	Real property.	Business assessment.	Income.
HASTINGS—*Continued.*	No.	Acres.	$	$	$	$	$
Sidney.....Tp.	4,143	69,581	1,893,372	817,970	2,678,942	33,150	2,100
Thurlow..... "	3,782	53,682	1,161,665	1,306,750	2,431,065	540,150	.....
Tudor and Cashel.. "	879	63,418	77,466	45,560	116,141	900	.....
Tyendinaga..... "	3,327	78,223	1,247,125	396,540	1,592,205	3,870	.....
Wollaston..... "	775	50,555	165,942	29,575	132,872	1,900	.....
Totals 1908	32,804	1,054,204	8,932,112	4,232,354	12,868,824	610,047	3,600
1907	32,629	1,067,627	.....	.....	11,306,576	474,837	3,510
Bancroft .....Vill.	537	387	22,755	85,240	100,445	15,454	1,058
Madoc..... "	1,007	423	121,387	308,374	327,661	35,030	9,277
Marmora..... "	845	470	59,733	203,250	239,133	28,297	1,793
Stirling ..... "	904	593	80,012	215,329	257,641	31,319	2,765
Tweed..... "	1,453	398	162,570	414,180	501,750	45,804	1,250
Deseronto.....Tn.	3,049	533	289,510	743,070	916,080	112,303	21,345
Totals.... 1908	7,795	2,804	735,967	1,969,443	2,342,710	268,207	37,488
1907	7,389	2,809	.....	.....	2,338,289	302,858	33,914
*Trenton, Town 1908	3,548	1,800	433,568	896,868	1,202,541	141,441	29,412
1907	4,369	1,800	.....	.....	1,132,551	123,368	27,903
*Belleville City.. 1908	9,808	1,700	1,023,162	3,555,478	3,714,905	473,693	127,480
1907	9,515	1,700	.....	.....	3,447,995	433,708	137,227
HURON:							
Ashfield ....Tp.	2,710	64,010	1,973,300	534,790	2,466,690	7,700	1,588
Colborne..... "	1,527	34,061	1,022,950	353,800	1,366,600	9,825	975
Goderich ..... "	1,959	52,332	1,404,260	348,010	1,726,370	1,500	.....
Grey ..... "	3,066	64,638	1,950,040	865,810	2,794,750	13,640	2,290
Hay ..... "	3,140	52,486	1,535,665	836,620	2,329,810	23,475	1,650
Howick..... "	3,600	67,515	1,914,058	953,814	2,861,242	13,335	3,700
Hullett..... "	2,450	53,479	1,478,850	520,650	1,976,000	4,500	.....
McKillop ..... "	2,303	52,170	1,703,590	572,100	2,244,170	900	.....
Morris..... "	2,210	55,095	1,397,150	732,400	2,100,850	5,050	600
Stanley ..... "	1,829	43,320	1,541,564	454,128	1,980,392	2,745	1,570
Stephen..... "	3,650	56,802	2,036,570	736,990	2,708,210	26,450	1,000
Tuckersmith ..... "	2,109	40,694	1,638,316	483,670	2,099,986	8,868	7,330
Turnberry ..... "	1,806	35,650	902,640	451,070	1,327,210	5,702	1,700
Usborne..... "	1,973	42,687	1,998,000	435,500	2,412,100	6,075	200
Wawanosh E..... "	1,646	41,734	1,190,668	458,750	1,631,168	3,877	.....
Wawanosh W..... "	1,801	41,720	1,127,100	492,000	1,595,000	11,200	1,000
Totals.... 1908	37,779	798,393	24,814,721	9,230,102	33,620,848	144,842	23,603
1907	37,966	798,146	.....	.....	33,611,893	149,773	25,585
Bayfield .....Vill.	540	1,763	44,390	62,600	98,545	4,850	357
Blyth..... "	816	449	64,050	182,186	236,236	31,408	3,020
Brussels..... "	1,179	422	58,110	283,815	335,125	39,480	6,450
Exeter..... "	1,606	1,040	139,348	413,475	520,473	42,133	7,004
Hensall ..... "	804	423	76,305	220,075	272,030	21,210	5,735
Wroxeter ..... "	439	484	33,836	100,035	132,171	10,474	906
Clinton .....Tn.	2,448	903	180,700	601,505	675,905	70,127	9,975
Goderich..... "	4,632	1,000	443,835	1,397,000	1,665,835	234,062	61,946

EXEMPTIONS AND TAXATION.—*Continued.*

Total.	Assessed for schools only.	Exempt from taxes or liable for local improvement only.	Taxes imposed. Municipal.	School.	Total.	Total per head.	Mills on $.	Municipalities.
$	$	$	$	$	$	$ c.		HASTINGS—*Con.*
2,714,192	.....	32,400	18,603	10,766	29,369	7 09	10.8	Sidney.
2,971,215	487,100	37,350	15,870	10,830	26,700	7 06	9.0	Thurlow
117,041	.....	6,885	1,567	1,677	3,244	3 69	27.7	Tudor & Cashel.
1,596,075	.....	51,460	12,257	9,335	21,592	6 49	13.5	Tyendinaga.
134,772	.....	2,645	1,227	1,575	2,802	3 62	20.8	Wollaston.
13,512,471	487,100	295,642	102,501	84,852	187,353	5 71	13.9	Totals.
11,784,923	74,000	.....	79,698	85,937	165,635	5 08	14.1	
116,957	.....	7,550	1,770	1,614	3,384	6 30	28.9	Bancroft.
371,968	.....	102,100	4,742	2,697	7,439	7 39	20.0	Madoc.
269,223	1,400	23,850	2,559	2,504	5,063	5 99	18.8	Marmora.
291,725	.....	37,700	3,322	2,357	5,679	6 28	19.5	Stirling.
548,804	4,600	75,000	5,626	3,490	9,116	6 27	16.6	Tweed.
1,049,728	.....	116,500	20,435	8,183	28,618	9 39	27.3	Deseronto.
2,648,405	6,000	362,700	38,454	20,845	59,299	7 61	22.4	Totals.
2,675,061	4,950	.....	31,121	22,013	53,134	7 19	19.9	
1,373,394	97,375	128,785	22,262	9,793	32,055	9 03	23.3	*Trenton.
1,283,822	99,750	.....	19,963	9,608	29,571	6 77	23.0	
4,316,078	30,000	863,735	88,568	25,574	114,142	11 64	26.4	*Belleville.
4,018,930	25,000	.....	91,401	20,921	112,322	11 80	27.9	
								HURON.
2,475,978	.....	41,400	8,458	6,959	15,417	5 69	6.2	Ashfield.
1,377,400	.....	10,150	6,259	4,277	10,536	6 90	7.6	Colborne.
1,727,870	.....	†25,900	10,119	4,897	15,016	7 67	8.7	Goderich.
2,810,680	.....	21,100	17,230	7,490	24,720	8 06	8.8	Grey.
2,354,935	.....	42,475	10,464	8,846	19,310	6 15	8.2	Hay.
2,878,277	.....	6,630	16,869	9,637	26,506	7 36	9.2	Howick.
1,980,500	.....	23,500	13,063	6,417	19,480	7 95	9.8	Hullett.
2,245,070	.....	31,520	15,476	6,146	21,622	9 39	9.6	McKillop.
2,103,500	.....	28,700	14,133	6,394	20,527	9 29	9.7	Morris.
1,984,707	.....	15,300	11,952	5,030	16,982	9 28	8.6	Stanley.
2,735,660	.....	65,350	12,894	9,797	22,691	6 22	8.3	Stephen.
2,116,184	.....	22,000	13,329	4,250	17,579	8 34	8.3	Tuckersmith.
1,334,612	.....	26,500	6,010	5,278	11,288	6 25	8.5	Turnberry.
2,418,675	.....	21,100	20,992	4,360	25,352	12 85	10.5	Usborne.
1,635,045	.....	18,250	6,238	5,845	12,083	7 34	7.4	Wawanosh E.
1,607,200	.....	24,100	5,971	5,295	11,266	6 26	7.0	Wawanosh W.
33,789,293	.....	423,975	189,457	100,918	290,375	7 69	8.6	Totals.
33,787,251	.....	.....	166,793	104,789	271,582	7 15	8.0	
103,752	650	8,445	863	986	1,849	3 42	17.8	Bayfield.
270,664	9,480	10,000	4,221	1,624	5,845	7 16	21.6	Blyth.
381,055	4,000	6,800	6,150	2,735	8,885	7 54	23.3	Brussels.
569,610	5,000	32,350	8,895	2,848	11,743	7 31	20.6	Exeter.
298,975	.....	24,350	3,499	1,794	5,293	6 58	17.7	Hensall.
143,551	.....	1,700	1,819	1,076	2,895	6 59	20.2	Wroxeter.
756,007	9,500	106,300	13,033	6,825	19,858	8 11	26.3	Clinton.
1,981,842	416,300	175,000	31,033	11,769	42,802	9 24	21.8	Goderich.

POPULATION, AREA, ASSESSMENT,

Municipalities.	Assessed population, 1908.	Area assessed.	Real property. Exclusive of buildings.	Real property. Buildings.	Assessed values. Real property.	Business assessment.	Income.
HURON.—*Con.*	No.	Acres.	$	$	$	$	$
Seaforth ..... Tn.	2,211	550	157,260	679,691	744,051	91,712	21,500
Wingham ..... "	2,310	600	589,370	257,800	687,070	87,595	3,700
Totals.... 1908	16,985	7,631	1,787,204	4,198,182	5,367,441	633,051	120,592
1907	16,889	7,810	.....	.....	5,220,211	614,448	136,606
KENORA:							
‡Ignace ..... Tp.	.....	.....	.....	.....	.....	.....	.....
§Jaffray & Melick.. "	179	32,657	55,841	40,161	94,082	.....	.....
Van Horne..... "	521	12,899	85,367	133,068	208,010	19,215	.....
Totals.... 1908	700	45,556	141,208	173,229	302,092	19,215	.....
1907	460	12,021	.....	.....	161,698	9,116	.....
Keewatin ..... Tn.	1,222	2,560	89,953	301,187	364,175	105,260	19,200
Kenora..... "	6,257	3,840	797,715	1,340,410	1,960,675	236,084	236,920
Totals.... 1908	7,479	6,400	887,668	1,644,597	2,324,850	341,344	256,120
1907	6,272	6,400	.....	.....	2,083,935	336,725	180,183
KENT:							
Camden..... ...Tp.	2,155	40,488	1,324,995	245,120	1,547,690	1,550	.....
Chatham ..... "	4,821	84,088	2,394,678	997,130	3,325,808	13,125	.....
Dover..... "	4,025	67,829	2,178,450	525,781	2,619,841	5,410	.....
Harwich ..... "	4,815	88,393	3,259,034	757,955	3,918,489	5,800	4,665
Howard..... ... "	2,790	58,031	2,016,230	464,095	2,438,875	6,850	.....
Orford ..... "	2,484	49,846	1,417,837	349,000	1,736,177	10,750	500
Raleigh ..... "	4,170	71,280	2,317,035	433,915	2,689,775	4,890	20,600
Romney ..... "	1,723	26,217	776,209	192,725	941,159	5,570	3,725
Tilbury E ..... "	2,742	54,447	1,440,842	308,450	1,733,292	6,385	120,263
Zone..... "	1,099	27,126	530,963	134,425	658,188	950	23,400
Totals.... 1908	30,824	567,745	17,656,273	4,408,596	21,609,294	61,280	173,153
1907	30,917	568,448	.....	.....	21,217,619	85,446	10,094
Thamesville..... Vill.	821	371	69,150	186,000	228,000	18,150	7,930
Tilbury ..... "	1,564	577	80,750	298,210	323,620	30,550	4,244
Blenheim .....Tn.	1,319	490	103,563	346,945	387,208	36,855	5,737
Bothwell..... "	757	206	55,265	153,215	180,480	17,695	5,032
Dresden ..... "	1,634	642	103,295	378,040	448,635	33,350	8,029
Ridgetown ..... "	2,103	618	156,195	528,835	607,230	60,195	5,700
Wallaceburg . ... "	3,148	577	224,055	621,900	632,055	72,745	47,891
Totals.... 1908	11,346	3,481	792,273	2,513,145	2,807,228	269,540	84,563
1907	11,676	3,553	.....	.....	2,759,975	275,432	88,503
*Chatham, 1908	10,228	1,650	1,671,736	3,837,997	4,436,327	524,807	94,736
City.. 1907	9,942	1,650	.....	.....	4,301,909	495,786	87,714
LAMBTON:							
Bosanquet.....Tp.	2,398	71,023	1,631,886	558,020	2,172,376	4,190	2,690
Brooke ..... "	3,003	74,051	2,074,770	436,280	2,487,100	10,245	.....
Dawn..... "	3,043	65,532	1,201,720	211,320	1,365,040	1,000	.....
Enniskillen..... "	3,809	82,020	2,179,895	371,100	2,532,595	2,000	88,950

‡Organized September, 1908. §Organized August, 1908, and no taxes levied in 1908.

EXEMPTIONS AND TAXATION.—*Continued.*

Total.	Assessed for schools only.	Exempt from taxes or liable for local improvement only.	Taxes imposed.					Municipalities.
			Municipal.	School.	Total.	Total per head.	Mills on $.	
$	$	$	$	$	$	$ c.		HURON.— *Con.*
857,263	44,400	92,900	19,737	6,098	25,835	11 68	30.1	Seaforth.
778,365	14,000	160,100	14,183	7,475	21,658	9 38	27.8	Wingham.
6,121,084	503,330	617,945	103,433	43,230	146,663	8 63	24.0	Totals.
5,971,265	435,510	.....	98,553	41,443	139,996	8 29	23.4	Totals.
								KENORA:
.....	.....	.....	.....	.....	.....	.....	.....	‡Ignace.
94,082	.....	1,920	.....	.....	.....	.....	.....	§Jaffray & Melick.
227,225	.....	10,425	1,595	1,200	2,795	5 36	12.3	Van Horne.
321,307	.....	12,345	1,595	1,200	2,795	5 36	8.7	Totals.
170,814	.....	.....	787	1,200	1,987	4 32	11.6	Totals.
488,635	.....	29,965	6,164	5,461	11,625	9 51	23.8	Keewatin.
2,433,679	48,250	177,450	49,791	23,423	73,214	11 70	30.1	Kenora.
2,922,314	48,250	207,415	55,955	28,884	84,839	11 34	29.0	Totals.
2,600,843	.....	.....	43,669	29,045	72,714	11 59	28.0	Totals.
								KENT:
1,549,240	.....	22,425	13,225	7,377	20,602	9 56	13.3	Camden.
3,338,933	2,000	†66,000	45,335	14,478	59,813	12 41	17.9	Chatham.
2,625,251	.....	84,390	20,653	14,151	34,804	8 65	13.3	Dover.
3,928,954	.....	98,500	28,009	13,111	41,120	8 54	10.5	Harwich.
2,445,725	.....	41,450	7,679	8,952	16,631	5 96	6.8	Howard.
1,747,427	.....	30,660	17,489	8,289	25,778	10 38	14.8	Orford.
2,715,265	.....	61,175	35,880	8,709	44,589	10 69	16.4	Raleigh.
950,454	.....	27,775	11,702	4,518	16,220	9 41	17.1	Romney.
1,859,940	.....	16,000	38,458	8,008	46,466	16 95	25.0	Tilbury E.
682,538	.....	7,200	6,370	2,698	9,068	8 25	13.3	Zone.
21,843,727	2,000	455,575	224,800	90,291	315,091	10 22	14.4	Totals.
21,313,159	2,000	.....	238,300	84,213	322,513	10 43	15.1	Totals.
254,080	.....	27,150	4,857	1,601	6,458	7 87	25.4	Thamesville.
358,414	2,000	55,340	8,750	3,111	11,861	7 58	33.1	Tilbury.
429,800	.....	63,300	6,314	3,437	9,751	7 39	22.7	Blenheim.
203,207	2,900	28,000	3,809	1,475	5,284	6 98	26.0	Bothwell.
490,014	.....	32,700	8,963	4,000	12,963	7 93	26.5	Dresden.
673,125	.....	77,800	12,417	6,149	18,566	8 83	27.6	Ridgetown.
752,691	.....	213,900	16,188	7,657	23,845	7 57	31.7	Wallaceburg.
3,161,331	4,900	498,190	61,298	27,430	88,728	7 82	28.1	Totals.
3,123,910	1,750	.....	61,943	26,254	88,197	7 55	28.2	Totals.
5,055,870	220,395	1,073,406	147,878	39,965	187,843	18 37	37.2	*Chatham,
4,885,409	209,570	.....	141,627	36,212	177,839	17 89	36.4	*Chatham,
								LAMBTON:
2,179,256	.....	17,530	14,326	8,129	22,455	9 36	10.3	Bosanquet.
2,497,345	.....	23,950	27,996	10,217	38,213	12 72	15.3	Brooke.
1,366,040	.....	48,000	19,756	8,265	28,021	9 21	20.5	Dawn.
2,623,545	.....	18,400	28,922	12,509	41,431	10 88	15.8	Enniskillen.

POPULATION, AREA, ASSESSMENT,

Municipalities.	Assessed population, 1908.	Area assessed.	Real property.		Assessed values.		
			Excluding buildings.	Buildings.	Real property.	Business assessment.	Income.
LAMBTON.—*Con.*	No.	Acres.	$	$	$	$	$
Euphemia.....Tp.	1,825	39,146	850,751	194,725	1,028,836	5,947	.....
Moore ..... "	3,947	72,570	2,141,053	715,661	2,824,684	33,443	28,050
Plympton..... "	3,139	75,015	2,086,910	453,392	2,502,902	4,450	.....
Sarnia..... "	1,844	38,497	993,258	323,242	1,246,100	600	300
Sombra ..... "	3,735	71,913	1,264,030	354,370	1,588,400	11,760	.....
Warwick.. ..... "	2,702	69,648	2,040,093	285,428	2,299,721	2,900	.....
Totals... 1908	29,445	659,415	16,461,366	3,903,538	20,047,754	76,535	119,990
Totals... 1907	29,655	656,893	.....	.....	20,181,817	80,131	5,910
Alvinston.....Vill.	841	444	57,530	202,395	228,450	24,664	5,555
Arkona ..... "	466	400	27,060	80,865	102,925	8,905	1,825
Courtright,..... "	401	433	36,035	106,858	132,943	9,799	.....
Oil Springs..... "	747	1,961	79,015	167,211	223,666	15,225	49,920
Point Edward. .... "	883	708	104,740	187,442	278,782	3,792	.....
Thedford..... "	583	490	26,720	95,065	115,935	10,467	.....
Watford..... "	1,289	400	75,538	292,912	330,650	29,903	3,251
Wyoming ..... "	665	475	40,336	97,299	121,100	9,277	1,420
Forest. .....Tn.	1,472	950	109.667	344,069	409,386	35,539	5,200
Petrolea..... "	3,798	2,700	393,210	945,940	1,116,450	80,162	63,722
Sarnia ..... "	9,922	1,450	1,594,535	3,711,015	4,316,500	346,452	88,022
Totals... 1908	21,067	10,411	2,544,386	6,231,071	7,376,787	574,185	218,915
Totals... 1907	21,361	10,274	.....	.....	7,428,217	581,571	138,143
LANARK:							
Bathurst.....Tp.	2,127	61,653	959,812	363,170	1,294,957	6,525	300
Beckwith ..... "	1,448	56,891	385,596	142,225	518,136	1,190	.....
Burgess N ..... "	712	31,474	347,555	101,135	442,190	.....	2,000
Dalhousie, etc. .... "	1,486	70,865	321,130	153,060	466,010	4,482	.....
Darling..... "	674	41,657	71,920	39,725	106,695	600	.....
Drummond..... "	1,819	57,609	872,953	296,550	1,146,703	5,280	940
Elmsley N..... "	854	28,466	501,170	141,572	634,742	4,060	.....
Lanark..... "	1,533	60,198	608,325	254,535	839,410	6,225	.....
Lavant..... "	415	43,194	51,602	30,825	77,152	1,885	15
Montague..... "	1,886	62,433	443,181	176,970	605,026	.....	.....
Pakenham ..... "	1,597	54,279	494,022	152,435	618,907	15,475	1,000
Ramsay ..... "	1,823	60,647	1,026,247	383,670	1,377,367	14,682	1,566
Sherbrooke S..... "	751	37,204	73,957	37,458	102,585	1,400	.....
Totals... 1908	17,125	666,570	6,157,520	2,273,330	8,229,880	61,804	5,821
Totals... 1907	17,091	683,552	.....	.....	8,201,559	59,654	5,897
Lanark .....Vill.	814	1,019	52,055	188,780	210,635	23,795	7,975
Almonte .....Tn.	2 933	700	163,425	723,975	686,955	114,009	25,318
Carleton Place..... "	4,248	550	260,125	812,855	950,680	102,659	58,001
Perth..... .. "	3,489	1,400	454,495	1,047,955	1,178,450	110,495	61,215
Totals... 1908	11,484	3,669	930,100	2,773,565	3,026,720	350,958	152,509
Totals... 1907	11,188	3,740	.....	.....	3,011,300	350,114	138,748
*Smith's Falls 1908	5,693	1,030	515,465	1,347,335	1,542,200	118,488	15,396
Town 1907	5,362	1,030	.....	.....	1,505,900	108,752	20,797

EXEMPTIONS AND TAXATION.—*Continued*

Total.	Assessed for schools only.	Exempt from taxes or liable for local improvement only.	Taxes imposed. Municipal.	School.	Total.	Total per head.	Mills on $.	Municipalities.
$	$	$	$	$	$	c.		LAMBTON.—*Con.*
1,034,783	.....	16,640	7,999	5,108	13,107	7 18	12.7	Euphemia.
2,886,177	.....	32,030	26,634	10,480	37,114	9 40	12.9	Moore.
2,507,352	.....	37,400	19,403	11,770	31,173	9 93	12.4	Plympton.
1,247,000	3,700	70,400	14,115	5,438	19,553	10 60	15.7	Sarnia.
1,600,160	.....	30,000	19,784	9,881	29,665	7 94	18.5	Sombra.
2,302,621	.....	25,800	18,355	5,108	23,463	8 68	10.2	Warwick.
20,244,279	3,700	320,150	197,290	86,905	284,195	9 65	14.0	Totals.
20,267,858	4,000	.....	185,554	96,149	281,703	9 50	13.9	
258,669	4,000	31,475	3,945	2,470	6,415	7 63	24.8	Alvinston.
113,655	.....	5,000	1,183	938	2,121	4 55	18.7	Arkona.
142,742	.....	9,950	1,298	801	2,099	5 23	14.7	Courtright.
288,811	6,000	22,560	4,499	2,250	6,749	9 03	23.4	Oil Springs.
282,574	7,850	13,400	3,703	1,893	5,596	6 34	19.8	Point Edward.
126,402	.....	5,850	1,832	1,142	2,974	5 10	23.5	Thedford.
363,804	.....	37,800	5,314	4,425	9,739	7 56	26.8	Watford.
131,797	.....	16,535	2,329	1,318	3,647	5 48	27.7	Wyoming.
450,125	.....	44,350	7,289	4,897	12,186	8 28	27.1	Forest.
1,260,334	33,000	222,700	25,518	10,587	36,105	9 51	28.6	Petrolea.
4,750,974	81,200	989,050	91,205	33,162	124,367	12 53	26.2	Sarnia.
8,169,887	132,050	1,398,670	148,115	63,883	211,998	10 06	25.9	Totals.
8,147,931	134,500	.....	148,209	64,330	212,539	9 95	26.1	
								LANARK:
1,301,782	.....	28,025	4,796	5,705	10,501	4 94	8.1	Bathurst.
519,326	.....	9,685	3,894	4,395	8,289	5 72	16.0	Beckwith.
444,190	.....	6,500	1,803	1,936	3,739	5 25	8.4	Burgess N.
470,492	.....	8,230	2,922	3,702	6,624	4 46	14.1	Dalhousie, etc.
107,295	.....	4,950	762	1,140	1,902	2 82	17.7	Darling.
1,152,923	.....	22,800	6,775	5,966	12,741	7 00	11.1	Drummond.
638,802	.....	8,000	3,936	2,441	6,377	7 47	10.0	Elmsley N.
845,635	.....	23,450	4,077	3,864	7,941	5 18	9.4	Lanark.
79,052	.....	5,275	821	1,265	2,086	5 03	26.4	Lavant.
605,026	.....	15,125	3,793	5,682	9,475	5 02	15.7	Montague.
635,382	.....	27,550	5,716	5,033	10,749	6 73	16.9	Pakenham.
1,393,615	.....	32,550	8,584	5,407	13,991	7 67	10.0	Ramsay.
103,985	.....	8,830	956	1,285	2,241	2 98	21.6	Sherbrooke S.
8,297,505	.....	200,970	48,835	47,821	96,656	5 64	11.7	Totals.
8,267,110	.....	.....	49,644	47,662	97,306	5 69	11.8	
242,405	.....	30,200	2,782	2,341	5,123	6 29	21.1	Lanark.
826,282	.....	200,445	14,828	7,547	22,375	7 63	27.1	Almonte.
1,111,340	22,000	122,300	18,600	10,802	29,402	6 92	26.5	Carleton Place.
1,350,160	5,000	324,000	23,375	11,920	35,295	10 12	26.1	Perth.
3,530,187	27,000	676,945	59,585	32,610	92,195	8 03	26.1	Totals.
3,500,162	99,800	.....	58,736	31,245	89,981	8 04	25.7	
1,676,084	.....	320,600	36,080	14,595	50,675	8 90	30.2	*Smith's Falls.
1,635,449	.....	.....	31,269	13,706	44,975	8 39	27.5	

POPULATION, AREA, ASSESSMENT

Municipalities.	Assessed population, 1908.	Area assessed.	Real property.		Assessed values.		
			Excluding buildings.	Buildings.	Real property.	Business assessment.	Income.
LEEDS:	No.	Acres.	$	$	$	$	$
Bastard and Burgess S.....Tp.	2,376	56,184	1,252,685	541,885	1,759,225	19,146	.....
Crosby N..... "	900	42,261	264,957	80,375	341,097	865	.....
Crosby S..... "	1,389	37,062	475,525	298,955	739,080	9,255	2,020
Elizabethtown..... "	3,564	76,075	920,500	527,535	1,388,800	9,110	2,400
Elmsley S..... "	733	22,416	331,886	123,655	449,176	2,915	.....
Escott Front..... "	987	24,087	289,823	139,665	422,963	4,350	900
Kitley..... "	1,705	50,881	735,090	296,160	1,011,550	2,620	1,200
Leeds and Lansdowne Front.... "	2,435	59,756	1,360.616	588,790	1,905,611	7,425	750
Leeds and Lansdowne Rear..... "	2,263	45,195	924,669	472,580	1,366,099	26,405	3,367
Yonge Front..... "	1,360	31,609	307,968	187,242	490,385	4,600	1,700
Yonge & Escott Rr. "	1,173	27,629	296,848	127,610	418,858	3,060	200
Totals... {1908	18,885	478,155	7,160,567	3,384,452	10,292,844	89,751	12,537
Totals... {1907	18,926	468,509	.....	.....	10,376,234	94,924	13,102
Athens.....Vill.	800	500	80,120	310,890	323,310	21,595	10,496
Newboro..... "	419	888	26,170	78,620	88,790	6,364	300
Westport..... "	796	500	28,950	96,675	105,925	13,586	1,652
Gananoque.....Tn.	4,028	1,206	395,720	859,775	1,192,345	159,090	25,300
Totals... {1908	6,043	3,094	530,960	1,345,960	1,710,370	200,635	37,748
Totals... {1907	6,227	3,113	.....	.....	1,674,083	202,248	38,649
*Brockville, Town.... {1908	9,132	1,242	1,146,345	2,734,450	3,294,600	309,325	149,775
*Brockville, Town.... {1907	8,926	1,242	.....	.....	3,222,805	304,650	152,725
LENNOX & ADDINGTON:							
Adolphustown.....Tp.	560	11,679	251,678	85,206	321,157	100	1,000
Amherst Island.... "	707	14,668	263,630	106,460	349,490	4,700	400
Camden East..... "	3,478	86,399	1,177,401	536,500	1,688,651	29,605	8,500
Denbigh, etc..... "	915	46,648	47,834	18,726	60,960	.....	.....
Ernestown..... "	2,832	62,141	971,600	520,035	1,476,635	11,670	1,375
Fredericksburgh N. "	1,412	22,730	461,605	292,915	719,420	.....	.....
Fredericksburgh S.. "	995	20,534	466,965	261,551	716,866	375	.....
Kaladar, etc..... "	1,161	57,386	58,820	68,135	122,210	2,925	.....
Richmond..... "	2,190	49,714	828,735	182,625	992,960	2,250	.....
Sheffield..... "	1,805	72,338	522,266	306,560	740,481	15,061	.....
Totals... {1908	16,058	444,237	5,050,534	2,378,713	7,188,830	66,686	11,275
Totals... {1907	15,977	443,886	.....	.....	7,234,224	74,281	12,913
Bath.....Vill.	384	2,276	50,903	73,386	114,489	6,712	327
Newburgh..... "	524	3,200	49,560	73,710	117,720	5,750	2,200
Napanee.....Tn.	3,026	600	302,861	1,025,253	1,068.114	123,831	64,719
Totals... {2908	3,934	6,076	403,324	1,172,349	1,300,323	136,293	67,246
Totals... {1907	3,776	6,074	.....	.....	1,207,721	118,194	44,708
LINCOLN:							
Caistor.....Tp.	1,447	32,772	562,215	184,966	719,181	3,315	.....

EXEMPTIONS AND TAXATION.—*Continued.*

Total.	Assessed for schools only.	Exempt from taxes or liable for local improvement only.	Taxes imposed. Municipal.	School.	Total.	Total per head.	Mills on $.	Municipalities.
$	$	$	$	$	$	$ c.		LEEDS:
1,778,371	.....	35,345	6,427	8,480	14,907	6 27	8.4	Bastard and Burgess S.
341,962	.....	4,235	3,356	3,685	7,041	7 82	20.6	Crosby N.
750,355	.....	35,400	2,866	5,530	8,396	6 04	11 2	Crosby S.
1,400,310	.....	59,235	10,663	10,511	21,174	5 94	15.1	Elizabethtown.
452,091	.....	6,365	2,190	2,435	4,625	6 31	10.2	Elmsley S.
428,213	.....	6,525	3,820	2,935	6,755	6 84	15.8	Escott Front.
1,015,370	.....	19,700	4,809	6,272	11,081	6 50	10.9	Kitley.
1,913,786	.....	43,795	12,759	8,971	21,730	8 92	11.4	Leeds and Lansdowne Front.
1,395,871	.....	31,150	7,236	6,370	13,606	6 01	9.7	Leeds and Lansdowne Rear.
496,685	.....	4,825	4,639	3,984	8,623	6 34	17.4	Yonge Front.
422,118	.....	5,600	2,378	4,716	7,094	6 05	16.8	Yonge & Escott Rear.
10,395,132	.....	252,175	61,143	63,889	125,032	6 62	12.0	Totals.
10,484,260	.....	.....	56,118	67,441	123,559	6 53	11.8	
355,401	.....	67,700	2,641	2,690	5,331	6 66	15.0	Athens.
95,454	.....	16,000	904	1,202	2,106	5 03	22.1	Newboro.
121,163	.....	19,700	1,977	2,162	4,139	5 20	34.2	Westport.
1,376,735	17,050	63,150	26,138	10,245	36,383	9 03	26.4	Gananoque.
1,948,753	17,050	166,550	31,660	16,299	47,959	7 94	24.6	Totals.
1,914,980	15,450	.....	30,469	16,095	46,564	7 48	24.3	
3,753,700	139,950	586,195	72,973	30,927	103,900	11 38	27.7	*Brockville.
3,680,180	73,200	.....	70,331	30,648	100,979	11 31	27.4	
								LENNOX & ADDINGTON:
322,257	.....	15,727	2,007	1,893	3,900	6 96	12.1	Adolphustown.
354,590	.....	20,600	2,187	2,024	4,211	5 96	11.9	Amherst Island.
1,726,756	.....	25,250	13,953	10,634	24,587	7 07	14.2	Camden East.
60,960	.....	5,600	818	1,337	2,155	2 36	35.4	Denbigh, etc.
1,489,680	.....	15,000	11,786	8,230	20,016	7 07	13.4	Ernestown.
719,420	.....	35,100	5,962	3,379	9,341	6 62	13.0	Fredericksburgh N.
717,241	.....	11,650	3,674	3,466	7,140	7 18	10.0	Fredericksburgh S.
125,135	.....	4,745	1,108	1,908	3,016	2 59	24.1	Kaladar, etc.
995,210	.....	18,400	7,681	5,980	13,661	6 24	13.7	Richmond.
755,512	.....	88,345	5,220	4,824	10,044	5 56	13.3	Sheffield.
7,266,791	.....	240,417	51,396	43,675	98,071	6 11	13.5	Totals.
7,321,418	.....	.....	60,748	40,822	101,570	6 36	13.9	
121,528	.....	9,800	1,261	1,200	2,461	6 41	20.3	Bath.
125,670	.....	5,550	1,470	1,697	3,167	6 04	25.2	Newburgh.
1,256,664	.....	260,000	23,720	9,840	33,560	11 09	26.7	Napanee.
1,503,862	.....	275,350	26 451	12,737	39,188	9 96	26.1	Totals.
1,370,623	.....	.....	23,651	12,042	35,693	9.45	26.0	
								LINCOLN:
722,496	.....	28,000	4,053	4,298	8,351	5 77	11.6	Caistor.

POPULATION, AREA, ASSESSMENT,

Municipalities.	Assessed population, 1908.	Area assessed.	Real property.		Assessed values.		
			Excluding buildings.	Buildings.	Real property.	Business assessment.	Income.
LINCOLN:—*Con.*	No.	Acres.	$	$	$	$	$
Clinton.....Tp.	1,821	24,815	1,010,680	437,335	1,427,995	3,500	25
Gainsborough..... "	2,123	39,784	865,671	337,567	1,179,318	9,175	975
Grantham..... "	2,091	19,285	969,170	522,025	1,444,495	5,350	3,200
Grimsby N..... "	1,449	15,657	596,505	376,465	967,620	.....	300
Grimsby S..... "	1,296	18,130	397,913	294,432	679,615	12,500	11,045
Louth..... "	1,790	18,789	763,002	218,232	968,859	2,357	990
Niagara..... "	1,513	22,163	854,334	275,765	1,117,449	4,140	1,200
Totals.... 1908	13,530	191,395	6,019,490	2,646,787	8,504,532	40,337	17,735
1907	13,252	190,339	.....	.....	8,125,438	68,928	20,821
Beamsville.....Vill.	908	520	73,035	189,950	250,285	17,729	13,908
Grimsby..... "	1,271	510	235,520	346,375	534,645	34,034	2,000
Merritton..... "	1,617	450	128,433	472,153	559,586	90,088	9,345
Port Dalhousie..... "	1,037	187	124,975	356,350	457,625	77,757	13,821
Niagara.....Tn.	1,688	698	192,763	520,427	535,940	24,980	2,262
Totals.... 1908	6,521	2,365	754,726	1,885,255	2,338,081	214,588	41,336
1907	6,352	2,297	.....	.....	2,031,032	219,935	17,693
*St. Catharines, City.. 1908	12,303	2,400	1,560,660	4,492,071	5,271,986	829,282	237,186
1907	12,295	2,600	.....	.....	5,218,786	636,247	229,952
MANITOULIN:							
Assiginack.....Tp.	927	45,100	186,779	86,365	271,544	10,332	.....
Billings..... "	433	21,680	47,687	23,780	67,267	1,913	.....
Burpee..... "	278	19,565	36,418	7,420	42,038	.....	.....
Carnarvon..... "	711	29,103	116,338	65,503	177,641	3,582	200
Cockburn Is..... "	300	21,421	54,815	20,830	72,695	1,945	.....
Gordon..... "	726	38,600	95,752	34,675	127,927	500	.....
Howland..... "	1,100	50,670	135,480	65,535	193,015	3,000	.....
Sandfield..... "	279	20,074	28,283	11,845	36,628	.....	.....
Tehkummah ..... "	382	14,133	72,820	22,020	94,740	1,332	.....
Totals.. 1908	5,136	263,346	774,372	337,973	1,083,495	22,601	200
1907	5,059	264,757	.....	.....	1,107,018	24,051	200
Gore Bay.....Tn.	746	500	44,050	124,540	158,290	18,500	.....
Little Current..... "	1,125	326	49,534	116,180	153,714	11,252	1,150
Totals.. 1908	1,871	826	93,584	240,720	312,004	29,752	1,150
1907	1,808	826	.....	.....	298,414	32,060	5,436
MIDDLESEX:							
Adelaide.....Tp.	1,769	44,097	1,682,580	400,780	2,004,460	4,313	.....
Biddulph..... "	1,926	39,191	1,642,086	266,982	1,859,068	6,207	700
Caradoc..... "	3,138	62,084	1,810,550	704,500	2,453 785	10,500	950
Delaware..... "	1,322	23,503	666,345	267,580	918,725	5,640	150
Dorchester N..... "	3,262	51,635	1,733,335	876,316	2,544,451	1,400	.....
Ekfrid ..... "	2,326	53,436	1,814,880	439,065	2,221,445	8,580	1,400
Lobo..... "	2,281	47,265	1,785,650	470,725	2,228,125	9,892	.....
London ..... "	8,239	99,590	4,318,337	2,596,790	5,922,152	49,695	18,307
McGillivray..... "	2,360	66,753	2,294,150	313,500	2,614,850	900	.....
Metcalfe..... "	1,323	36,199	1,108,285	234,005	1,327,540	5,482	.....
Mosa..... "	1,854	47,235	1,241,822	277,940	1,515,298	.....	.....
Nissouri W..... "	2,637	49,613	1,950,180	700,235	2,625,215	13,605	.....

EXEMPTIONS AND TAXATIONS.—*Continued.*

Total.	Assessed for schools only.	Exempt from taxes or liable for local improvements only.	Taxes imposed. Municipal.	School.	Total.	Total per head.	Mills on $	Municipalities.
$	$	$	$	$	$	$ c.		LINCOLN :—*Con.*
1,431,520	3,880	20,020	11,251	6,681	17,932	9 85	12.5	Clinton.
1,189,468	.....	23,920	6,148	6,079	12,227	5 76	10.3	Gainsborough.
1,453,045	190,000	46,700	8,732	5,610	14,342	6 86	9.9	Grantham.
967,920	.....	5,350	8,596	3,467	12,063	8 33	12.5	Grimsby N.
703,160	4,018	12,730	6,068	3,143	9,211	7 11	13.1	Grimsby S.
972,206	.....	12,375	7,855	4,715	12,570	7 02	12.9	Louth.
1,122,789	.....	12,650	10,342	2,198	12,540	8 29	11.2	Niagara.
8,562,604	197,898	161,745	63,045	36,191	99,236	7 33	11.6	Totals.
8,215,187	196,018	.....	59,301	36,736	96,037	7 25	11.7	
281,922	7,500	12,700	4,505	1,998	6,503	7 16	23.1	Beamsville.
570,679	.....	47,250	6,974	4,808	11,782	9 27	20.6	Grimsby.
659,019	23,500	41,000	11,484	4,791	16,275	10 06	24.7	Merritton.
549,203	189,900	23,700	5,080	3,844	8,924	8 61	16.2	Port Dalhousie.
563,182	.....	177,250	10,933	2,112	13,045	7 73	23.2	Niagara.
2,624,005	220,900	301,900	38,976	17,553	56,529	8 67	21.5	Totals.
2,268,660	226,320	.....	40,761	14,506	55,267	8 70	24.4	
6,338,454	554,200	780,745	105,219	35,237	140,456	11 42	22.2	*St. Catharines.
6,084,985	554,960	.....	117,644	31,637	149,281	12 14	24.5	
								MANITOULIN :
281,876	2,430	1,600	1,595	2,891	4,486	4 84	15.9	Assiginack.
69,180	.....	4,200	1,445	300	1,745	4 03	25.2	Billings.
42,038	.....	1,800	681	680	1,361	4 90	32.4	Burpee.
181,423	.....	†4,200	955	1,419	2,374	3 34	13.1	Carnarvon.
74,640	.....	2,950	510	1,109	1,619	5 40	21.7	Cockburn Is.
128,427	.....	2,500	1,400	853	2,253	3 10	17.5	Gordon.
196,015	1,000	8,000	968	2,193	3,161	2 87	16.1	Howland.
36,628	.....	3,500	138	700	838	3 00	22.9	Sandfield.
96,072	.....	100	897	1,209	2,106	5 51	21.9	Tehkummah.
1,106,299	3,430	28,850	8,589	11,354	19,943	3 88	18.0	Totals.
1,131,269	21,455	.....	7,271	11,236	18,507	3 66	16.4	
176,790	2,500	10,300	2,463	2,610	5,073	6 80	28.7	Gore Bay.
166,116	2,500	12,000	1,247	2,829	4,076	3 62	24.5	Little Currant.
342,906	5,000	22,300	3,710	5,439	9,149	4 89	26.7	Totals.
335,910	9,750	.....	3,065	4,312	7,377	4 08	22.0	
								MIDDLESEX :
2,008,773	.....	78,900	13,816	4,675	18,491	10 45	9.2	Adelaide.
1,865,975	.....	50,000	9,144	5,482	14,626	7 59	7.8	Biddulph.
2,465,235	.....	61,265	16,431	8,275	24,706	7 87	10.0	Caradoc.
924,515	.....	15,200	6,489	4,069	10,558	7 99	11.4	Delaware.
2,545,851	.....	65,200	17,482	8,308	25,790	7 91	10.1	Dorchester N.
2,231,425	.....	32,500	17,088	6,197	23,285	10 01	10.4	Ekfrid.
2,238,017	.....	28,250	12,377	5,925	18,302	8 02	8.2	Lobo.
5,990,154	.....	992,975	27,533	18,840	46,373	5 02	7.7	London.
2,615,750	.....	22,800	13,421	8,332	21,753	9 22	8.3	McGillivray.
1,333,022	.....	14,750	11,575	3,780	15,355	11 61	11.5	Metcalfe.
1,515,298	.....	4,464	11,145	6,197	17,342	9 35	11.4	Mosa.
2,638,820	.....	25,200	18,198	7,088	25,286	9 59	9.6	Nissouri W.

POPULATION, AREA, ASSESSMENT

Municipalities.	Assessed population, 1908.	Area assessed.	Real property.		Assessed values.		
			Excluding buildings.	Buildings.	Real property.	Business assessment.	Income.
	No.	Acres.	$	$	$	$	$
MIDDLESEX—*Con.*							
Westminster.....Tp.	4,791	63,523	2,813,860	1,135,555	3,859,790	16,745	1,350
Williams E..... "	1,235	38,352	1,232,215	91,196	1,319,801	3,375	.....
Williams W..... "	1,227	35,139	974,280	185,290	1,150,970	2,180	150
Totals.. {1908	39,690	757,615	27,068,555	8,990,459	34,565,675	138,514	23,007
{1907	39,829	757,654	.....	.....	34,574,429	124,700	24,303
Ailsa Craig.....Vill.	697	446	†30,136	†137,544	146,930	13,824	1,950
Glencoe..... "	798	439	62,020	244,220	285,740	26,829	2,840
Lucan..... "	850	500	64,983	186,417	228,300	26,625	6,150
Newbury..... "	383	500	24,098	54,235	64,083	6,992	.....
Wardsville..... "	237	406	15,595	53,170	55,665	1,850	1,340
Parkhill.....Tn.	1,393	523	95,955	346,505	363,160	36,567	15,723
Strathroy..... "	2,812	2,000	198,080	896,030	974,230	107,848	39,310
Totals... {1908	7,170	4,814	490,867	1,918,121	2,118,108	220,535	67,313
{1907	7,153	4,820	.....	.....	2,091,637	226,435	57,988
*London, City.. {1908	49,431	4,478	10,296,349	15,539,975	20,780,143	2,540,413	994,477
{1907	47,769	4,478	.....	.....	19,291,004	2,313,150	903,313
MUSKOKA:							
Brunel.....Tp.	775	40,963	95,900	33,700	124,840	1,700	.....
Cardwell..... "	370	33,300	76,448	20,510	94,588	.....	.....
Chaffey..... "	1,101	43,909	120,964	46,390	160,054	2,475	.....
Draper..... "	845	39,657	97,312	29,975	122,627	1,272	740
McLean & Ridout.. "	719	44,540	96,796	65,690	159,386	4,655	.....
Macaulay..... "	664	38,321	88,003	28,151	113,619	250	.....
Medora & Wood... "	1,128	70,293	200,275	324,945	475,220	4,735	.....
Monck..... "	1,136	28,212	174,020	177,189	343,459	5,987	610
Morrison..... "	862	26,404	67,221	36,565	101,291	2,580	140
Muskoka..... "	723	33,163	83,678	94,655	114,258	.....	1,100
Oakley..... "	299	25,054	43,771	15,930	57,681	450	.....
Ryde..... "	505	25,510	51,879	13,394	61,516	500	.....
Stephenson..... "	1,096	42,437	140,082	87,375	219,957	6,082	300
Stisted..... "	616	41,927	90,653	37,025	116,433	805	.....
Watt..... "	869	35,108	123,140	80,194	193,774	5,017	69
Totals... {1908	11,708	568,828	1,550,142	1,091,708	2,458,703	36,508	2,959
{1907	11,444	556,377	.....	.....	2,400,613	34,847	1,349
Port Carling.....Vill.	334	3,816	43,055	77,285	109,740	6,495	243
Bracebridge.....Tn.	2,918	605	170,455	679,775	660,175	103,625	20,900
Gravenhurst..... "	2,417	691	111,231	455,695	504,851	53,955	9,204
Huntsville..... "	2,315	438	118,683	445,394	505,002	67,472	14,401
Totals... {1908	7,984	5,553	443,424	1,658,149	1,779,768	231,547	44,748
{1907	7,858	5,547	.....	.....	1,732,087	242,546	38,977
NIPISSING:							
Bonfield.....Tp.	1,150	36,379	107,619	40,350	142,219	1,954	.....
Bucke..... "	801	17,693	118,320	45,135	159,855	.....	.....
Caldwell..... "	1,249	32,552	281,552	218,580	472,132	9,927	.....
Calvin..... "	515	25,107	56,905	13,383	67,588	.....	.....

EXEMPTIONS AND TAXATION.—*Continued.*

Total.	Assessed for schools only.	Exempt from taxes or liable for local improvement only.	Taxes imposed. Municipal.	School.	Total.	Total per head.	Mills on $.	Municipalities.
$	$	$	$	$	$	$ c.		MIDDLESEX—*Con.*
3,877,885	15,200	89,625	28,398	12,422	40,820	8 52	10.5	Westminster.
1,323,176	.....	3,610	8,122	3,750	11,872	9 61	9.0	Williams E.
1,153,300	.....	8,600	7,388	3,562	10,950	8 92	9.5	Williams W.
34,727,196	15,200	1,493,339	218,607	106,902	325,509	8 00	9.4	Totals.
34,723,432	14,500	.....	226,742	103,125	329,867	8 28	9.5	
162,704	.....	20,750	2,776	1,220	3,996	5 73	24.6	Ailsa Craig.
315,409	1,500	20,500	5,146	1,177	6,323	7 92	20 0	Glencoe.
261,075	.....	23,100	2,922	2,610	5,532	6 51	21.2	Lucan.
71,075	.....	14,250	1,054	484	1,538	4 02	21.6	Newbury.
58,855	.....	13,100	639	560	1,199	5 06	20.4	Wardsville.
415,450	.....	79,300	6,951	3,541	10,492	7 53	25.3	Parkhill.
1,121,388	5,710	119,880	19,434	8,000	27,434	9 76	24.5	Strathroy.
2,405,956	7,210	290,880	38,922	17,592	56,514	7 88	23.5	Totals.
2,376,060	11,640	.....	37,476	17,687	55,163	7 71	23 2	
24,315,033	226,850	5,056,181	426,843	191,461	618,304	12 51	25.4	*London.
22,507,467	260,255	.....	427.244	126,267	553,511	11 59	24.6	
								MUSKOKA:
126,540	.....	4,760	548	1,859	2,407	3 11	19.0	Brunel.
94,588	.....	2,370	658	868	1,526	4 12	16.1	Cardwell.
162,529	.....	7,300	1,658	2,579	4,237	3 85	26.1	Chaffey.
124,639	.....	4,680	2,230	1,568	3,798	4 49	30.5	Draper.
164,041	400	3,100	1,221	1,392	2,613	3 63	15.9	McLean and R.
113,869	.....	2,535	1,707	1,690	3,397	5 12	29.8	Macaulay.
479,955	.....	50,000	4,800	4,017	8,817	7 82	18.4	Medora and W.
350,056	.....	7,750	2,468	2,681	5,149	4 53	14.7	Monck.
104,011	.....	2,495	815	1,203	2,018	2 34	19.4	Morrison.
115,358	.....	64,075	1,171	1,439	2,610	3 61	22.6	Muskoka.
58,131	.....	2,020	1,145	516	1,661	5 56	28.6	Oakley.
62,016	.....	3,757	454	1,266	1,720	3 41	27.7	Ryde.
226,339	.....	7,500	1,428	2,858	4,286	3 91	18.9	Stephenson.
117,238	.....	11,245	1,058	1,514	2,572	4 18	21.9	Stisted.
198,860	.....	9,560	1,273	2,485	3,758	4 32	18.9	Watt.
2,498,170	400	183,147	22,634	27,935	50,569	4 32	20.2	Totals.
2,436,809	455	.....	20,652	26,985	47,637	4 16	19.5	
116,478	.....	10,600	1,187	850	2,037	6 10	17.5	Port Carling.
784,700	27,040	190,055	14,944	8,240	23,184	7 95	29.5	Bracebridge.
568,010	.....	62,075	10,679	6,475	17,154	7 10	30.2	Gravenhurst
586,875	.....	59,075	12,382	6,514	18,896	8 16	32.2	Huntsville.
2,056,063	27,040	321,805	39,192	22,079	61,271	7 67	29.8	Totals.
2,013,610	51,040	.....	32,776	23,465	56,241	7 16	27.9	
								NIPISSING:
144,173	.....	5,750	1,190	2,572	3,762	3 27	26.1	Bonfield.
159,855	1,200	3,600	3,051	2,401	5,452	6 81	34.1	Bucke.
482,059	.....	28,000	1,420	3,195	4,615	3 69	9.6	Caldwell.
67,588	.....	†2,700	836	715	1,551	3 01	23.0	Calvin.

POPULATION, AREA, ASSESSMENT,

Municipalities.	Assessed population, 1908.	Area assessed.	Real property.		Assessed values.		
			Excluding buildings	Buildings.	Real property.	Business assessment.	Income.
	No.	Acres.	$	$	$	$	$
NIPISSING—*Con.*							
Cameron .....Tp.	194	13,210	20,967	15,825	36,717	.....	.....
Chamberlain ..... "	182	22,923	54,375	2,820	57,195	.....	.....
Coleman ..... "	1,583	8,623	77,510	200,380	277,890	700	2,907,100
Dymond..... "	526	20,467	126,760	19,190	141,200	1,750	500
Evanturel ..... "	231	22,896	79,808	1,000	75,808	542	.....
Ferris..... "	877	40,753	89,755	48,516	128,071	1,910	.....
Harley..... "	384	23,669	100,890	7,660	107,110	2,000	400
Hudson ..... "	176	20,401	47,825	8,175	54,800	400	.....
Kerns..... "	364	22,545	100,550	27,859	124,459	646	.....
Mattawan..... "	149	11,865	18,015	8,450	25,275	.....	.....
Papineau..... "	616	22,533	44,260	14,205	57,995	.....	.....
Springer..... "	1,199	41,749	178,190	50,647	225,937	.....	.....
Widdifield..... "	2,101	51,872	214,980	141,025	331,180	3,920	7,245
Totals ... 1908	12,297	435,237	1,718,281	863,200	2,485,431	23,749	2,915,245
Totals ... 1907	10,745	411,668	.....	.....	2,024,901	35,354	1,761,305
Bonfield .....Tn.	510	539	14,124	41,805	34,429	3,201	.....
Cache Bay..... "	739	563	32,530	124,620	149,650	26,869	10,584
Cobalt ..... "	3,501	459	262,620	442,770	672,490	60,745	629,643
Englehart..... "	718	650	70,288	108,790	171,078	25,167	6,060
Haileybury ..... "	2,265	563	617,320	520,977	1,088,972	84,985	.....
Latchford..... "	597	382	115,200	98,425	203,625	52,255	8,296
Mattawa..... "	1,517	922	83,125	265,108	245,508	26,633	3,314
New Liskeard ..... "	3,027	740	360,809	676,338	987,147	89,636	20,805
North Bay..... "	5,817	500	955,301	1,637,425	2,290,026	165,716	65,405
Sturgeon Falls. .... "	2,760	1,440	401,924	1,689,589	2,014,463	83,038	7,000
Totals ... 1908	21,451	6,758	2,913,241	5,605,847	7,857,388	618,245	751,107
Totals ... 1907	19,559	6,119	.....	.....	5,745,101	702,486	494,955
NORFOLK:							
Charlotteville .....Tp.	2,761	59,893	891,374	406,910	1,267,734	9,025	6,890
Houghton ..... "	1,811	33,668	353,585	165,615	502,650	8,250	.....
Middleton..... "	2,356	44,840	778,544	216,830	973,699	6,663	1,005
Townsend ..... "	3,422	64,599	1,978,945	727,126	2,639,946	6,850	5,535
Walsingham N..... "	1,807	40,132	486,340	241,360	714,760	5,580	.....
Walsingham S..... "	1,636	53,202	674,855	206,535	857,315	4,315	104
Windham ..... "	3,155	66,934	1,164,625	617,155	1,727,440	8,260	2,050
Woodhouse..... "	1,966	34,820	1,106,680	476,960	1,540,380	9,740	4,730
Totals ... 1908	18,914	398,088	7,434,948	3,058,491	10,223,924	58,623	20,314
Totals ... 1907	19,323	398,686	.....	.....	10,252,200	63,776	21,576
Delhi .....Vill.	801	500	35,800	163,700	187,875	24,975	3,826
Port Dover..... "	1,062	413	93,561	318,090	343,701	27,348	5,836
Port Rowan..... "	660	500	47,190	142,235	186,875	13,675	2,263
Waterford..... "	1,200	451	57,625	237,525	259,150	22,405	9,925
Simcoe.....Tn.	3,325	805	249,370	815,755	1,005,525	128,993	52,645
Totals ... 1908	7,048	2,669	483,546	1,677,305	1,983,126	217,396	74,495
Totals ... 1907	6,688	2,668	.....	.....	1,897,764	207,799	71,701

EXEMPTIONS AND TAXATION.—*Continued.*

Total,	Assessed for schools only.	Exempt from taxes or liable for local improvement only.	Taxes imposed. Municipal.	School.	Total.	Total per head.	Mills on $.	Municipalities.
$	$	$	$	$	$	$ c.		
								NIPISSING—*Con.*
36,717	.....	75	304	408	712	3 67	19.4	Cameron.
57,195	.....	none	590	212	808	4 44	14.1	Chamberlain.
3,185,690	.....	none	38,228	12,438	50,666	32 01	15.9	Coleman.
143,450	.....	4,750	1,965	2,131	4,096	7 79	28.5	Dymond.
76,350	.....	5,000	428	754	1,182	5 12	15.5	Evanturel.
129,981	.....	10,200	1,626	1,912	3,538	4 03	27.2	Ferris.
109,510	1,950	1,440	1,464	801	2,265	5 90	20.7	Harley.
55,200	4,500	1,200	1,128	368	1,496	8 50	27.1	Hudson.
125,105	.....	3,950	1,948	1,162	3,110	8 54	24.9	Kerns.
25,275	.....	1,190	292	151	443	2 97	17.5	Mattawan.
57,995	.....	470	325	825	1,150	1 87	19.8	Papineau.
225,937	.....	2,900	2,382	2,616	4,998	4 17	22.1	Springer.
342,345	5,200	24,825	5,130	4,748	9,878	4 70	28.9	Widdifield.
5,424,425	12,850	96,050	62,307	37,409	99,722	8 11	18.4	Totals.
3,821,560	18,450	.....	40,370	30,616	70,986	6 61	18.6	
37,630	.....	21,500	312	746	1,058	2 07	28.1	Bonfield.
187,103	.....	7,500	1,785	2,498	4,283	5 80	22.9	Cache Bay.
1,362,878	.....	32,900	27,324	5,477	32,801	9 37	24.1	Cobalt.
202,305	.....	†8,000	3,195	1,012	4,207	5 86	20.8	Englehart.
1,173,957	.....	49,325	23,860	9,898	33,758	14 90	28.8	Haileybury.
264,176	2,000	10,000	4,598	1,844	6,442	10 79	24.4	Latchford.
275,455	.....	102,725	4,793	5,058	9,851	6 49	35.8	Mattawa.
1,097,588	.....	†50,000	21,794	6,585	28,379	9 38	25.9	New Liskeard.
2,521,147	4,000	302,700	17,862	17,942	35,804	6 16	14.2	North Bay.
2,104,501	52,000	77,050	23,312	12,538	35,850	12 99	17.0	Sturgeon Falls.
9,226,740	58,000	661,700	128,835	63,598	192,433	8 97	20.9	Totals.
6,942,542	740,496	.....	102,101	54,884	156,985	8 03	22.6	
								NORFOLK:
1,283,649	.....	30,550	6,305	7,129	13,434	4 87	10.5	Charlotteville.
510,900	.....	16,550	4,660	5,207	9,867	5 45	19.3	Houghton.
981,307	.....	21,675	7,305	5,972	13,277	5 64	13.5	Middleton.
2,652,331	.....	66,125	15,156	4,282	19,438	5 68	7.3	Townsend.
720,340	.....	12,940	5,561	5,855	11,416	6 32	15.8	Walsingham N.
861,734	.....	24,075	5,407	5,002	10,409	6 36	12.1	Walsingham S.
1,737,750	.....	54,340	9,778	9,867	19,645	6 23	11.3	Windham.
1,554,850	.....	43,260	4,881	5,140	10,021	5 10	6.4	Woodhouse.
10,302,861	.....	269,515	59,053	48,454	107,507	5 68	10.4	Totals.
10,337,552	.....	.....	57,148	54,843	111,991	5 80	10.8	
216,676	.....	11,625	2,282	2,094	4,376	5 46	20.2	Delhi.
376,885	.....	67,950	3,875	2,979	6,854	6 45	18.2	Port Dover.
202,813	.....	2,550	2,386	1,705	4,091	6 20	20.2	Port Rowan.
291,480	.....	36,000	4,198	3,061	7,259	6 05	24.9	Waterford.
1,187,163	7,200	59,600	19,206	8,884	28,090	8 45	23.7	Simcoe.
2,275,017	7,200	177,725	31,947	18,723	50,670	7 19	22.3	Totals.
2,177,264	7,200	.....	29,727	18,629	48,356	7 23	22.2	

POPULATION, AREA, ASSESSMENT,

Municipalities.	Assessed Population, 1908.	Area assessed.	Real property.		Assessed values.		
			Excluding buildings.	Buildings.	Real property.	Business assessment.	Income.
NORTHUMBERLAND :	No.	Acres.	$	$	$	$	$
Alnwick ..... Tp.	867	17,754	252,380	204,895	446,175	6,415	250
Brighton ..... "	2,232	48,100	372,024	880,490	1,225,994	950	300
Cramahe ..... "	2,318	46,470	784,935	367,425	1,120,790	9,470	.....
Haldimand ..... "	3,465	76,801	1,070,820	500,465	1,532,285	5,260	800
Hamilton ..... "	3,480	62,280	1,358,065	772,970	2,075,035	11,400	2,300
Monaghan S ..... "	905	18,089	511,500	158,760	658,510	1,493	.....
Murray ..... "	2,401	48,593	811,000	404,575	1,174,575	6,100	4,600
Percy ..... "	2,729	51,417	761,121	274,309	978,970	19,504	.....
Seymour ..... "	2,766	67,293	796,097	358,660	1,116,982	13,615	.....
Totals.... 1908	21,163	436,797	6,717,942	3,922,549	10,329,316	74,207	8,250
Totals.... 1907	21,250	435,597	.....	.....	10,274,489	74,587	11,300
Brighton ..... Vill.	1,346	2,706	179,382	346,131	508,513	22,766	.....
Colborne. ..... "	1,103	1,069	87,630	247,620	319,800	24,600	3,200
Hastings ..... "	754	559	55,363	161,400	175,763	17,400	1,400
Campbellford ..... Tn.	2,700	600	229,460	610,290	784,750	95,480	21,480
Cobourg ..... "	5,265	2,417	557,294	1,314,608	1,552,202	146,551	32,586
Totals.... 1908	11,168	7,351	1,109,129	2,680,049	3,341,028	306,797	58,666
Totals.... 1907	10,524	7,395	.....	.....	3,227,239	305,395	47,298
ONTARIO :							
Brock ..... Tp.	3,341	66,542	1,974,831	824,065	2,722,146	14,922	200
Mara ..... "	2,836	61,305	1,214,340	448,200	1,625,615	17,447	2,400
Pickering ..... "	4,813	71,790	2,395,107	986,785	3,291,692	40,230	15,080
Rama ..... "	1,108	35,500	152,997	73,525	218,672	8,335	341
Reach ..... "	2,975	63,458	1,560,383	503,395	2,026,978	7,100	.....
Scott ..... "	1,982	49,350	1,039,851	361,700	1,380,951	4,450	3,000
Scugog ..... "	435	9,409	198,970	91,890	284,290	250	.....
Thorah ..... "	1,152	32,253	820,387	341,230	1,151,517	4,050	.....
Uxbridge ..... "	2,435	51,856	696,456	314,525	985,481	3,800	50
Whitby E ..... "	2,689	32,025	1,119,045	577,150	1,653,195	22,160	800
Whitby .. .. "	1,807	30,913	1,077,045	439,020	1,485,515	7,650	2,700
Totals.... 1908	25,573	504,401	12,249,412	4,961,485	16,826,052	130,394	24,571
Totals.... 1907	25,428	504,196	.....	.....	16,839,098	127,364	29,025
Beaverton ..... Vill.	971	457	62,675	280,940	295,165	17,895	3,000
Cannington ..... "	1,020	463	79,910	274,020	328,930	40,090	7,050
Port Perry ..... "	1,247	650	74,280	364,325	406,605	54,030	8,283
Oshawa ..... Tn.	5,647	2,400	392,885	1,476,826	1,749,261	167,171	50,500
Uxbridge ..... "	1,700	500	63,830	462,350	462,480	50,005	7,830
Whitby ..... "	2,290	3,890	610,445	456,313	858,983	51,947	21,730
Totals.... 1908	12,875	8,270	1,284,025	3,314,774	4,101,424	381,138	98,393
Totals.... 1907	13,593	8,263	.....	.....	3,908,008	400,051	98,441
OXFORD :							
Blandford ..... Tp.	1,460	29,656	915,792	361,832	1,249,924	7,220	2,050
Blenheim ..... "	4,117	66,804	2,033,873	1,143,225	3,109,473	31,825	1,300
Dereham ..... "	3,627	64,894	2,509,781	853,181	3,201,662	21,462	1,200
Nissouri E ..... "	2,433	46,433	1,975,002	793,140	2,748,442	20,255	5,481
Norwich N ..... "	2,090	33,873	1,225,300	465,700	1,669,000	9,750	7,100
Norwich S ..... "	1,878	35,753	748,869	388,065	1,129,434	10,003	3,500
Oxford E ..... "	1,939	34,627	1,136,415	419,285	1,535,700	7,660	3,712

EXEMPTIONS AND TAXATION.—*Continued.*

Total.	Assessed for schools only.	Exempt from taxes or liable for local improvement only.	Taxes imposed. Municipal.	School.	Total.	Total per head.	Mills on $.	Municipalities.
$	$	$	$	$	$	$ c.		NORTHUMBERLAND :
452,840	.....	11,100	2,564	1,670	4,234	4 88	9.3	Alnwick.
1,227,244	.....	26,520	7,438	6,043	13,481	6 04	11.0	Brighton.
1,130,260	.....	31,570	6,584	5,318	11,902	5 13	9.7	Cramahe.
1,538,345	.....	39,000	10,759	8,144	18,903	5 46	12.3	Haldimand.
2,088,735	.....	56,000	10,647	7,917	18,564	5 33	8.9	Hamilton.
660,003	.....	11,750	3,011	2,315	5,326	5 89	8.1	Monaghan S.
1,185,275	.....	41,000	6,166	7,197	13,363	5 57	11.3	Murray.
998,474	.....	56,460	8,067	6,054	14,121	5 17	14.1	Percy.
1,130,597	.....	37,775	10,465	6,899	17,364	6 28	15.4	Seymour.
10,411,773	.....	311,175	65,701	51,557	117,258	5 54	11.3	Totals.
10,360,376	.....	.....	62,757	56,536	119,293	56 1	11.5	
531,279	11,000	17,000	7,125	2,659	9,784	7 27	18.4	Brighton.
347,600	.....	15,450	4,097	2,875	6,972	6 32	20.1	Colborne.
194,563	.....	41,000	3,172	1,556	4,728	6 27	24.3	Hastings.
901,710	25,000	† 55,000	12,897	9,347	22,244	8 24	24.7	Campbellford.
1,731,339	118,550	319,700	31,025	13,558	44,583	8 47	25.8	Cobourg.
3,706,491	154,550	448,150	58,316	29,995	88,311	7 91	23.8	Totals.
3,579,932	145,550	.....	50,985	27,820	78,805	7 49	22.0	
								ONTARIO :
2,737,268	.....	76,750	13,865	8,264	22,129	6 62	8.1	Brock.
1,645,462	.....	36,925	9,398	5,541	14,939	5 27	9.1	Mara.
3,347,002	.....	90,200	19,310	11 545	30,855	6 41	9.2	Pickering.
227,348	.....	7,850	4,302	955	5,257	4 74	23.1	Rama.
2,034,078	.....	36,800	9,469	8,085	17,554	5 90	8.6	Reach.
1,388,401	.....	20,600	7,592	5,421	13,013	6 57	9.4	Scott.
284,540	.....	6,570	1,213	1,525	2,738	6 29	9.6	Scugog.
1,155,567	.....	10,100	5,485	2,632	8,117	7 05	7.0	Thorah.
989,331	.....	25,500	7,822	5,984	13,806	5 67	14.0	Uxbridge.
1,676,155	.....	43,000	8,900	5,587	14,487	5 39	8.6	Whitby E
1,495,865	.....	30,550	9,755	4,891	14,646	8 11	9.8	Whitby.
16,981,017	.....	384,845	97,111	60,430	157,541	6 16	9.3	Totals.
16,995,487	.....	.....	96,758	63,456	160,214	6 30	9.4	
316,060	.....	48,450	3,942	1,491	5,433	5 61	17.2	Beaverton.
376,070	.....	25,000	3,229	2,400	5,629	5 52	15.0	Cannington
468,918	.....	32,000	9,226	4,200	13,426	10 77	28.6	Port Perry.
1,966,932	19,425	120,450	40,120	15,881	56,001	9 92	28.5	Oshawa.
520,315	20,000	63,700	9,665	4,933	14,598	8 59	28.1	Uxbridge.
932,660	17,360	207,775	15,644	7,251	22,895	10 00	24.5	Whitby.
4,580,955	56,785	497,375	81,826	36,156	117,982	9 16	25.8	Totals.
4,406,500	207,385	.....	79,538	31,203	110,741	8 15	25.1	
								OXFORD :
1,259,194	.....	27,700	9,240	4,318	13,558	9 29	10.8	Blandford.
3,142,598	.....	67,625	17,325	14,378	31,703	7 70	10.1	Blenheim.
3,224,324	.....	161,300	23,497	10,992	34,489	9 51	10.7	Dereham.
2,774,178	.....	19,700	16,931	6,675	23,606	9 70	8.5	Nissouri E.
1,685,850	.....	22,000	15,507	7,797	23,304	11 15	13.8	Norwich N.
1,142,937	.....	7,500	8,634	6,036	14,670	7 81	12.8	Norwich S.
1,547,072	.....	20,000	10,398	5,542	15,940	8 22	10.3	Oxford E.

POPULATION, AREA, ASSESSMENT.

Municipalities.	Assessed population, 1908.	Area assessed.	Real property.		Assessed values.		
			Excluding buildings.	Buildings.	Real property.	Business assessment.	Income.
	No.	Acres.	$	$	$	$	$
OXFORD:—*Con.*							
Oxford N.....Tp.	1,149	21,075	854,895	266,850	1,112,045	7,050	1,400
Oxford W..... "	1,915	25,858	1,062,270	379,690	1,421,260	14,179	1,100
Zorra E..... "	3,736	57,281	2,954,467	1,263,657	3,968,924	29,890	4,000
Zorra W..... "	2,528	55,013	2,199,326	745,870	2,908,296	1,275	350
Totals.... 1908	26,872	471,267	17,615,990	7,080,495	24,054,160	160,569	31,193
Totals.... 1907	26,886	471,733	.....	.....	24,030,200	166,217	29,184
Embro.....Vill.	705	1,247	63,762	159,470	192,232	17,288	500
Norwich..... "	1,273	500	75,315	318,460	351,375	32,388	14,210
Ingersoll..... ...Tn.	5,063	2,200	553,750	1,247,700	1,702,350	171,985	95,550
Tillsonburg..... "	2,487	1,602	331,690	729,470	970,585	81,710	37,320
Totals.... 1908	9,528	5,549	1,024,517	2,455,100	3,216,542	303,371	147,580
Totals.... 1907	8,923	5,746	.....	.....	3,169,050	291,269	141,572
Woodstock City..... 1908	9,420	1,525	1,138,112	3,285,069	3,580,711	421,155	120,025
Woodstock City..... 1907	9,601	1,525	.....	.....	3,699,556	259,871	125,948
PARRY SOUND:							
Armour.....Tp.	976	38,168	161,568	64,361	221,609	4,023	.....
Carling..... "	306	29,524	38,855	13,810	50,365	.....	.....
Chapman..... "	742	40,174	93,445	66,933	150,908	4,760	666
Christie..... "	436	21,688	52,586	33,493	82,929	2,430	.....
Foley..... "	621	32,629	78,495	41,195	117,090	2,775	.....
Hagerman..... "	368	22,421	37,357	25,085	54,492	1,280	.....
Himsworth N..... "	903	19,165	36,327	82,960	112,787	24,387	.....
Himsworth S..... "	924	48,640	184,243	66,940	247,183	5,604	100
Humphrey..... "	600	32,130	144,359	159,665	291,174	18,610	.....
Joly..... "	274	22,896	44,383	13,780	57,953	250	.....
McDougall..... "	542	25,940	72,752	33,360	98,162	.....	.....
McKellar..... "	560	27,316	50,185	23,810	70,765	411	.....
McMurrich..... "	653	39,982	111,623	40,058	148,138	3,782	.....
Machar..... "	413	45,674	82,899	11,830	90,479	1,550	.....
Nipissing..... "	558	32,412	88,571	25,255	111,651	2,910	.....
Perry..... "	1,005	45,300	154,897	74,289	217,986	5,515	.....
Ryerson..... "	650	44,495	189,865	65,692	252,007	1,130	.....
Strong..... "	739	39,317	115,366	41,760	154,476	.....	.....
Totals.... 1908	11,270	607,871	1,737,776	884,276	2,530,154	79,417	766
Totals.... 1907	11,918	599,015	.....	.....	2,474,098	93,208	1,223
Burk's Falls.....Vill.	998	695	61,279	197,286	250,085	44,672	6,890
South River..... "	556	1,200	16,490	89,415	100,595	13,701	.....
Sundridge..... "	390	368	14,620	46,500	58,120	5,838	.....
Kearney.....Tn.	305	340	8,590	46,130	47,470	7,135	.....
Parry Sound..... "	3,819	1,300	583,963	974,790	1,416,298	136,525	37,242
Powassan..... "	719	742	52,420	90,470	125,500	16,080	900
Totals.... 1908	6,787	4,645	737,362	1,444,591	1,998,068	223,951	45,032
Totals.... 1907	6,534	4,101	.....	.....	1,717,025	209,447	22,620
PEEL:							
Albion.....Tp.	2,148	56,429	1,185,025	386,610	1,547,035	4,200	.....
Caledon..... "	3,527	68,539	1,243,065	581,300	1,772,615	23,875	1,850
Chinguacousy..... "	3,467	79,589	2,920,413	1,090,142	3,953,535	13,839	11,245

EXEMPTIONS AND TAXATION.—*Continued*

Total.	Assessed for schools only.	Exempt from taxes or liable for local improvement only.	Taxes imposed. Municipal.	School.	Total.	Total per head.	Mills on $.	Municipalities.
$	$	$	$	$	$	$ c.		OXFORD.—*Con.*
1,120,495	.....	9,700	6,883	3,501	10,384	9 04	9.3	Oxford N.
1,436,539	10,000	20,700	8,862	4,393	13,255	6 92	9.2	Oxford W.
4,002,814	.....	249,200	24,900	9,720	34,620	9 27	8.6	Zorra E.
2,909,921	.....	36,900	22,288	5,989	28,277	11 19	9.7	Zorra W.
24,245,922	10,000	642,325	164,465	79,341	243,806	9 07	10.1	Totals.
24,225,601	10,000	.....	132,909	78,545	211,454	7 86	8.7	
210,020	.....	31,000	2,740	1,500	4,240	6 01	20.2	Embro.
397,973	2,000	42,400	8,693	3,505	12,198	9 58	30.7	Norwich.
1,969,885	22,000	99,100	33,277	13,235	46,512	9 19	23.6	Ingersoll.
1,089,615	10,800	90,575	20,364	7,300	27,664	11 12	25.4	Tillsonburg.
3,667,493	34,800	263,075	65,074	25,540	90,614	9 51	24.7	Totals.
3,601,891	31,100	.....	66,513	21,746	88,259	9 89	24.5	
4,121,891	2,000	842,470	63,023	27,834	90,857	9 65	22.0	*Woodstock.
4,085,375	2,000	.....	59,365	25,330	84,695	8 82	20.7	
								PARRY SOUND:
225,632	.....	4,320	1,689	2,073	3,762	3 85	16.7	Armour.
50,365	.....	2,300	641	1,041	1,682	5 50	33.4	Carling.
156,334	.....	9,470	846	2,286	3,132	4 22	20.0	Chapman.
85,359	.....	3,150	361	1,222	1,583	3 63	18.5	Christie.
119,865	.....	? 600	601	853	1,454	2 34	12.1	Foley.
55,772	.....	950	331	1,233	1,564	4 25	28.0	Hagerman.
137,174	.....	,500	713	2,688	3,401	3 77	24.8	Himsworth N.
252,887	.....	4,000	1,196	3,144	4,340	4 70	17.2	Himsworth S.
309,784	.....	12,850	1,605	2,086	3,691	6 15	11.9	Humphrey.
58,203	.....	210	669	434	1,103	4 03	19.0	Joly.
98,162	.....	7,950	901	1,325	2,226	4 11	22.7	McDougall.
71,176	.....	3,230	649	1,371	2,020	3 61	28.4	McKellar.
151,920	.....	3,543	727	1,377	2,104	3 22	13.8	McMurrich.
92,029	.....	4,250	483	2,004	2,487	6 02	27.0	Machar.
114,561	.....	2,175	578	1,482	2,060	3 69	18.0	Nipissing.
223,501	.....	11,200	1,257	2,459	3,716	3 70	16.6	Perry.
253,137	.....	3,550	810	1,888	2,698	4 15	10.7	Ryerson.
154,476	.....	2,650	1,012	1,575	2,587	3 50	16.7	Strong.
2,610,337	.....	91,898	15,069	30,541	45,610	4 05	17.5	Totals.
2,568,529	.....	.....	15,503	29,883	45,386	3 81	17.7	
301,647	18,550	8,480	4,954	3,156	8,110	8 13	26.9	Burk's Falls.
114,296	.....	5,310	820	1,480	2,300	4 14	20.1	South River.
63,958	.....	3,000	930	832	1,762	4 52	27.5	Sundridge.
54,605	.....	7,250	338	983	1,321	4 33	24.2	Kearney.
1,590,065	30,650	142,455	21,149	9,692	30,841	8 08	19.4	Parry Sound.
142,480	.....	17,390	1,096	1,567	2,663	3 70	18.7	Powassan.
2,267,051	49,200	183,885	29,287	17,710	46,997	6 92	20 7	Totals.
1,949,092	54,775	.....	32,811	16,108	48,919	7 49	25.1	
								PEEL:
1,551,235	.....	24,600	8,407	7,204	15,611	7 27	10.1	Albion.
1,798,340	.....	51,750	13,014	10,583	23,597	6 69	13.1	Caledon.
3,978,619	.....	57,020	17,787	10,101	27,888	8 04	7.0	Chinguacousy.

POPULATION, AREA, ASSESSMENT,

Municipalities.	Assessed population, 1908.	Area assessed.	Real property.		Assessed values		
			Excluding buildings.	Buildings.	Real property.	Business assessment.	Income.
PEEL—*Con.*	No.	Acres.	$	$	$	$	$
Toronto ..... Tp.	5,152	65,004	2,079,155	921,670	2,930,725	24,025	3,700
Toronto Gore ..... "	833	19,008	598,241	210,964	795,255	1,880	300
Totals 1908	15,127	288,569	8,025,899	3,190,686	10,999,165	67,819	17,095
Totals 1907	15,123	288,547	.....	.....	10,988,245	69,926	18,170
Bolton ..... Vill.	630	500	44,265	194,410	217,425	20,503	9,680
Streetsville ..... "	570	462	45,520	156,740	176,260	12,394	1,269
Brampton ..... Tn.	3,215	1,215	287,783	931,653	114,236	90,268	67,611
Totals 1908	4,415	2,177	377,568	1,282,803	1,507,921	123,165	78,560
Totals 1907	4,225	2,122	.....	.....	1,483,334	122,291	91,711
PERTH:							
Blanshard ..... Tp.	2,283	45,897	†1,750,940	†780,360	‡2,496,350	‡3,450	‡2,100
Downie ..... "	2,441	48,456	2,002,760	738,700	2,717,960	2,735	500
Easthope N. ..... "	2,007	43,115	1,663,297	719,628	2,373,925	7,129	3,330
Easthope S. ..... "	1,926	23,731	1,165,479	736,440	1,876,069	44,007	400
Ellice ..... "	2,978	54,434	1,918,340	573,550	2,417,240	6,900	200
Elma ..... "	3,582	67,305	2,511,279	1,033,425	3,510,154	25,440	1,000
Fullarton ..... "	1,971	40,270	1,731,785	592,725	2,284,685	4,900	350
Hibbert ..... "	2,225	41,796	1,601,400	608,505	2,173,155	13,600	200
Logan ..... "	2,759	53,774	1,960,540	773,015	2,707,055	4,875	1,150
Mornington ..... "	2,928	50,052	1,533,915	832,960	2,302,975	10,630	2,570
Wallace ..... "	2,517	49,863	1,295,750	736,400	1,998,550	3,650	.....
Totals 1908	27,617	518,693	19,135,485	8,125,708	26,858,118	127,316	11,800
Totals 1907	27,271	518,402	.....	.....	26,760,005	121,444	12,175
Milverton ..... Vill.	876	470	†74,606	†241,819	286,425	20,950	12,950
Listowel ..... Tn.	2,370	1,500	183,435	701,180	793,815	94,180	5,900
Mitchell ..... "	1,812	1,400	225,313	517,578	668,761	80,951	18,794
Totals 1908	5,058	3,370	483,351	1,460,577	1,749,001	196,081	37,644
Totals 1907	5,048	3,367	.....	.....	1,735,450	196,998	35,644
St. Marys Town 1908	3,396	2,683	346,675	1,345,095	1,358,770	111,100	33,965
St. Marys Town 1907	3,344	2,684	.....	.....	1,353,895	110,653	33,535
Stratford City 1908	14,489	2,835	1,851,935	5,192,485	5,740,595	602,985	148,733
Stratford City 1907	14,069	2,835	.....	.....	5,267,810	594,535	155,965
PETERBOROUGH:							
Asphodel ..... Tp.	1,603	37,775	657,872	231,790	874,362	4,270	.....
Belmont and M. .... "	1,715	80,628	156,630	73,885	222,410	750	.....
Burleigh and A. .... "	601	34,222	63,975	46,685	103,775	4,650	.....
Chandos ..... "	745	43,496	66,063	25,362	83,450	700	.....
Douro ..... "	1,639	38,365	694,041	122,913	802,554	1,977	.....
Dummer ..... "	1,553	69,731	526,309	111,895	629,204	5,998	200
Ennismore ..... "	768	17,263	272,195	116,295	353,490	1,600	.....
Galway and C. ..... "	976	47,141	38,741	11,400	47,141	.....	.....
Harvey ..... "	994	68,987	210,666	32,095	236,261	.....	.....
Monaghan N. ..... "	1,112	13,989	522,432	207,650	716,482	12,500	.....
Otonabee ..... "	2,760	64,361	1,597,038	429,360	2,005,548	7,560	.....
Smith ..... "	2,580	58,035	1,217,285	431,550	1,611,835	.....	.....
Totals 1908	17,046	573,993	6,023,247	1,840,880	7,686,512	40,005	200
Totals 1907	17,058	574,499	.....	.....	7,618,038	28,978	.....

‡ Taken from return for 1907, as 1908 has not yet been received.

EXEMPTIONS AND TAXATION.—*Continued.*

Total.	Assessed for schools only.	Exempt from taxes or liable for local improvemet only.	Taxes imposed. Municipal.	School.	Total.	Total per head.	Mills on $.	Municipalities.
$	$	$	$	$	$	$		PEEL—*Con.*
2,958,450	.....	70,100	20,362	11,876	32,238	6 26	10.9	Toronto.
797,435	.....	13,950	5,536	2,364	7,900	9 48	9.9	Toronto Gore.
11,084,079	.....	217,420	65,106	42,128	107,234	7 09	9.7	Totals.
11,076,341	.....	.....	64,336	42,752	107,088	7 08	9.7	
247,608	.....	21,250	2,371	1,775	4,146	6 58	16.7	Bolton.
189,923	.....	26,000	3,555	1,425	4,980	8 74	26.2	Streetsville.
1,272,115	42,150	105,200	25,602	8,200	33,802	10 51	26.6	Brampton.
1,709,646	42,150	152,450	31,528	11,400	42,928	9 72	25.1	Totals.
1,697,336	38,150	.....	25,992	11,739	37,731	8 93	22.2	
								PERTH:
‡2,501,900	.....	†34,950	‡11,512	‡5,968	‡17,480	7 65	7.0	Blanshard.
2,721,195	.....	23,500	14,746	5,180	19,926	8 16	7.3	Downie.
2,384,384	.....	9,000	13,473	2,157	15,630	7 79	6.6	Easthope N.
1,920,476	.....	25,850	7,437	4,848	12,285	6 38	6.4	Easthope S.
2,424,310	.....	74,650	22,997	7,593	30,590	10 27	12.6	Ellice.
3,536,594	.....	34,550	23,724	8,529	32,253	9 00	9.1	Elma.
2,289,935	.....	39,825	11,529	4,720	16,249	8 24	7.1	Fullarton.
2,186,955	.....	36,750	14,807	6,176	20,983	9 43	9.6	Hibbert.
2,713,080	.....	26,500	17,750	8,352	26,102	9 46	9.6	Logan.
2,316,175	.....	63,900	19,133	7,040	26,173	8 94	11.3	Mornington.
2,002,200	.....	33,600	9,275	6,162	15,437	6 13	7.7	Wallace.
26,997,234	.....	403,075	166,383	66,725	233,108	8 44	8.6	Totals.
26,893,624	.....	.....	157,357	68,005	225,362	8 26	8.4	
320,325	6,500	†30,000	3,474	1,900	5,374	6 13	16.4	Milverton.
893,895	12,000	90,800	17,018	8,047	25,065	10 58	28.0	Listowel.
768,506	.....	74,130	14,908	5,064	19,972	11 02	26.0	Mitchell.
1,982,726	18,500	194,930	35,400	15,011	50,411	9 97	25.3	Totals.
1,968,092	16,500	.....	31,730	13,376	45,106	8 94	22.9	
1,503,835	.....	333,000	29,351	8,702	38,053	11 21	25.3	*St. Marys.
1,498,083	.....	.....	29,676	8,497	38,173	11 42	25.5	
6,492,313	133,400	1,303,825	125,189	40,293	165,482	11 42	25.5	*Stratford.
6,018,310	95,000	.....	118,095	39,088	157,183	11 17	26.1	
								PETERBOROUGH:
878,632	.....	15,300	6,763	5,562	12,325	7 69	14.0	Asphodel.
223,160	.....	8,105	2,715	4,371	7,086	4 13	31.8	Belmont and M.
108,425	.....	6,885	1,259	1,528	2,787	4 64	25.7	Burleigh and A.
84,150	.....	7,975	828	1,685	2,513	3 37	29 9	Chandos.
804,531	.....	14,400	5,407	4,392	9,799	5 98	12.2	Douro.
635,402	.....	9,000	4,039	4,658	8,697	5 60	13.7	Dummer.
355,090	.....	35,000	2,204	1,800	4,004	5 21	11.3	Ennismore.
47,141	.....	3,000	680	1,012	1,692	1 73	35.9	Galway and C.
236,261	.....	6,500	1,624	2,279	3,903	3 93	16.5	Harvey.
728,982	54,500	13,600	4,436	2,694	7,130	6 41	9.8	Monaghan N.
2,013,108	.....	20,850	11,932	8,391	20,323	7 36	10.1	Otonabee.
1,611,835	.....	†37,000	9,635	6,935	16,570	6 42	10.3	Smith.
7,726,717	54,500	177,615	51,522	45,307	96,829	5 68	12.5	Totals.
7,647,016	.....	.....	51,122	45,537	96,659	5 67	12.6	

POPULATION, AREA, ASSESSMENT.

Municipalities.	Assessed population, 1908.	Area assessed.	Real property.		Assessed values.		
			Excluding buildings.	Buildings.	Real property.	Business assessment.	Income.
PETERBOROUGH—*Con.*	No.	Acres.	$	$	$	$	$
Havelock.....Vill.	1,555	396	†56,839	†176,516	223,355	10,666	3,493
Lakefield..... "	1,503	485	145,085	362,590	474,675	68,495	3,100
Norwood..... "	860	393	47,090	266,025	221,265	17,685	1,666
Totals... 1908	3,918	1,274	249,014	805,131	919,295	96,846	8,259
Totals... 1907	3,650	1,262	.....	.....	868,345	98,849	10,276
*Peterborough City 1908	16,491	2,808	3,717,480	5,677,873	7,711,458	724,683	115,964
*Peterborough City 1907	16,000	2,211	.....	.....	6,308,452	630,509	122,270
PRESCOTT:							
Alfred.....Tp.	3,155	44,936	1,151,875	316,710	1,364,285	20,958	3,880
Caledonia..... "	1,581	44,930	763,897	261,456	1,014,453	14,950	600
Hawkesbury E.... "	4,074	56,550	326,275	228,000	447,675	2,495	.....
Hawkesbury W... "	1,410	29,508	†474,297	†254,870	668,967	.....	.....
Longueuil..... "	1,035	17,925	384,313	127,487	469,550	.....	.....
Plantaganet N.... "	3,873	51,224	853,437	393,245	1,121,182	19,155	4,200
Plantaganet S.... "	3,238	48,913	656,975	228,395	812,270	10,175	4,400
Totals... 1908	18,366	293,986	4,611,069	1,810,163	5,898,382	67,733	13,080
Totals... 1907	18,036	291,604	.....	.....	6,331,936	73,553	16,282
L'Orignal..... ..Vill.	1,155	4,050	171,246	258,144	350,890	11,805	10,762
Hawkesbury.....Tn.	4,442	1,700	199,931	531,775	532,706	53,743	5,500
Vankleek Hill..... "	1,682	620	123,840	413,105	442,945	47,174	4,850
Totals... 1908	7,279	6,370	495,017	1,203,024	1,326,541	112,722	21,112
Totals... 1907	7,297	6,370	.....	.....	1,318,278	110,867	19,524
PRINCE EDWARD:							
Ameliasburg.....Tp.	2,517	43,566	976,710	307,160	1,253,870	200	.....
Athol..... "	943	23,463	323,632	131,440	450,607	.....	.....
Hallowell..... "	2,185	43,282	806,550	345,825	1,118,725	480	700
Hillier..... "	1,446	30,800	649,275	228,420	863,295	5,100	.....
Marysburg N..... "	1,010	23,428	323,500	175,950	477,950	5,000	500
Marysburg S..... "	1,140	24,244	369,425	174,690	526,115	7,090	700
Sophiasburg..... "	1,598	43,111	696,895	351,000	1,001,845	.....	.....
Totals... 1908	11,139	231,894	4,145,987	1,714,485	5,692,707	17,870	1,900
Totals... 1907	10,918	233,418	.....	.....	5,674,777	22,370	1,500
Bloomfield.....Vill.	645	415	48,210	127,685	157,195	12,857	800
Wellington..... "	769	1,500	98,900	184,500	273,450	10,750	.....
Picton .....Tn.	3,732	552	430,052	1,370,778	1,550,230	142,280	36,125
Totals... 1908	5,146	2,467	577,162	1,682,963	1,980,875	165,887	36,925
Totals... 1907	5,132	2,467	.....	.....	1,786,557	159,818	28,750
RAINY RIVER:							
Alberton.....Tp.	285	24,896	131,615	7,200	137,565	1,130	.....
Atwood and C..... "	213	8,008	57,895	12,585	69,730	.....	.....
Chapple ..... "	872	72,734	220,212	23,980	241,597	1,737	250
Dilke ..... "	246	7,927	40,963	27,577	66,250	3,165	.....
Emo..... "	710	43,560	203,090	76,060	272,850	5,890	1,000
Lavallee..... "	536	51,477	219,460	38,600	253,110	950	.....
McIrvine .... "	30	5,221	169,136	1,700	170,836	.....	.....

EXEMPTIONS AND TAXATION.—*Continued.*

Total.	Assessed for schools only.	Exempt from taxes or liable for local improvement only.	Taxes imposed. Municipal.	School.	Total.	Total per head.	Mills on $.	Municipalities.
$	$	$	$	$	$	$ c.		PETERBOROUGH—*Con.*
237,514	4,718	†10,000	3,522	3,500	7,022	4 52	29.6	Havelock.
546,270	72,800	33,000	6,609	3,004	9,613	6 40	17.6	Lakefield.
240,616	.....	91,850	4,004	2,857	6,861	7 98	28.5	Norwood.
1,024,400	77,518	134,850	14,135	9,361	23,496	6 00	22.9	Totals.
977,470	120,675	.....	10,980	8,808	19,788	5 42	20.2	
8,552,105	255,020	1,683,895	93,007	66,757	159,764	9 69	18.7	*Peterborough.
7,067,231	204,640	.....	87,522	48,889	136,411	8 53	19.3	
								PRESCOTT:
1,389,123	.....	104,300	4,613	6,523	11,136	3 53	8.0	Alfred.
1,030,003	.....	10,900	3,713	5,307	9,020	5 71	8.8	Caledonia.
450,170	.....	106,600	6,878	9,104	15,982	3 92	35.5	Hawkesbury E.
668,967	.....	†60,200	6,098	4,349	10,447	7 41	15.6	Hawkesbury W.
469,550	.....	†42,250	1,621	2,063	3,684	3 56	7.8	Longueuil.
1,144,537	.....	125,500	7,665	9,412	17,077	4 41	14.9	Plantaganet N.
826,845	.....	†73,100	5,537	6,847	12,384	3 82	15.0	Plantaganet S.
5,979,195	.....	522,850	36,125	43,605	79,730	4 34	13.3	Totals.
6,421,771	.....	.....	36,416	45,721	82,137	4 55	12.8	
373,457	.....	78,500	1,709	2,139	3,848	3 33	10.3	L'Orignal.
591,949	25,000	199,000	11,605	6,786	18,391	4 14	31.1	Hawkesbury.
494,969	.....	94,000	4,570	5,733	10,303	6 13	20.8	Vankleek Hill.
1,460,375	25,000	371,500	17,884	14,658	32,542	4 47	22.3	Totals.
1,448,669	25,000	....	15,831	14,576	30,407	4 17	21.0	
								PRINCE EDWARD:
1,254,070	.....	30,000	12,161	2,917	15,078	5 99	12.0	Ameliasburg.
450,607	.....	4,465	3,614	2,702	6,316	6 70	14 0	Athol.
1,119,905	.....	33,650	7,168	7,176	14,344	5 77	12.8	Hallowell.
868,395	.....	14,400	4,036	5,146	9,182	6 35	10.6	Hillier.
483,450	.....	21,500	3,023	3,042	6,065	6 00	12.5	Marysburg N.
534,205	.....	17,700	3,013	2,812	5,825	5 11	10.9	Marysburg S.
1,001,845	.....	46,050	5,352	6,379	11,731	7 34	11.7	Sophiasburg..
5,712,477	.....	167,765	38,367	30,174	68,541	6 15	12.0	Totals.
5,698,647	.....	.....	43,029	30,110	73,139	6 70	12.8	
170,852	.....	18,700	2,942	961	3,903	6 05	22.8	Bloomfield.
284,200	.....	9,950	2,696	1,705	4,401	5 72	15.5	Wellington.
1,728,635	.....	250,600	22,271	17,790	40,061	10 73	23.2	Picton.
2,183,687	.....	279,250	27,909	20,456	48,365	9 40	22.1	Totals.
1,975,125	.....	.....	23,128	13,624	36,752	7 16	18.6	
								RAINY RIVER:
138,695	6,900	1,250	1,890	668	2,558	8 98	18.4	Alberton.
69,730	.....	750	1,627	470	2,097	9 85	30.1	Atwood and Curran.
243,584	34,518	2,595	2,311	5,458	7,769	8 91	31.9	Chapple.
69,415	350	2,290	1,167	683	1,850	7 52	26.7	Dilke.
279,740	14,400	6,300	3,674	3,844	7,518	10 59	26.9	Emo.
254,060	.....	4,950	3,624	2,925	6,549	12 22	25.8	Lavallee.
170,836	.....	none	1,895	427	2,322	77 40	13.6	McIrvine.

POPULATION, AREA, ASSESSMENT.

Municipality.	Assessed population, 1908.	Area assessed.	Real property.		Assessed values.		
			Excluding buildings.	Buildings	Real property.	Business assessment.	Income.
RAINY RIVER—*Con.*	No.	Acres.	$	$	$	$	$
Morley and P.....Tp.	449	36,271	117,898	43,687	156,760	4,250	.....
Worthington and B "	296	26,045	123,789	25,660	148,251	.....	.....
Totals... {1908	3,637	276,139	1,284,058	257,049	1,516,949	17,122	1,250
{1907	3,528	262,633	.....	.....	1,452,769	20,480	1,250
Fort Frances .....Tn.	1,499	750	706,020	284,277	932,337	70,715	17,330
Rainy River..... "	1,449	700	144,378	408,738	516,800	115,020	85,717
Totals... {1908	2,948	1,450	850,398	693,015	1,449,137	185,735	103,077
{1907	2,895	1,450	.....	.....	1,654,135	161,670	12,730
RENFREW:							
Admaston.....Tp.	1,997	71,325	572,620	224,130	781,590	1,675	.....
Algona S..... "	800	30,716	75,530	29,700	98,030	.....	.....
Alice and Fraser... "	1,937	57,817	398,365	184,500	574,300	.....	.....
Bagot and B..... "	1,227	61,428	103,319	56,677	147,471	4,600	200
Bromley ..... "	1,957	49,497	1,025,580	421,400	1,384,080	10,660	700
Brougham..... "	533	22,492	42,020	39,535	79,355	665	.....
Brudenell and L... "	1,117	63,853	129,065	71,685	187,500	1,775	.....
Grattan ..... "	1,869	62,873	193,845	116,585	302,030	3,300	.....
Griffith and M..... "	556	25,548	37,748	23,992	57,565	250	.....
Hagarty, Jones, etc. "	3,106	93,359	314,050	163,020	464,070	16,800	.....
Head, etc..... "	239	16,216	22,979	45,351	64,930	1,380	.....
Horton..... "	1,428	38,245	376,868	166,835	535,273	.....	500
McNab..... "	3,519	62,775	792,132	365,143	1,129,675	38,908	6,955
Pembroke..... "	995	8,251	203,947	105,625	306,097	692	500
Petewawa & Mck.. "	772	21,967	52,911	35,595	83,906	.....	.....
Radcliffe ..... "	383	20,989	21,630	24,655	43,485	2,215	.....
Raglan..... "	699	34,972	31,278	34,637	62,275	.....	.....
Rolph, etc. ..... "	958	35,945	65,874	92,485	153,959	2,500	2,515
Ross..... "	2,034	51,966	628,900	275,725	888,950	1,250	.....
Sebastopol..... "	638	32,694	37,303	19,677	56,260	400	.....
Stafford..... "	1,074	21,334	647,342	58,650	699,092	700	.....
Westmeath..... "	3,181	70,310	1,290,367	489,706	1,725,593	11,655	600
Wilberforce, etc... "	2,193	71,127	381,475	154,770	527,255	3,750	.....
Totals.. {1908	33,212	1,025,699	7,415,148	3,200,078	10,352,741	103,175	11,970
{1907	32,829	1,026,998	.....	.....	10,510,918	102,376	14,150
Cobden ....Vill.	828	469	89,100	200,275	270,575	17,004	1,050
Eganville ..... "	1,139	387	98,580	303,850	300,480	40,570	5,858
Arnprior..... ....Tn.	4,095	1,121	363,200	773,100	1,064,800	87,815	37,612
Pembroke..... "	5,864	625	726,375	1,866,175	2,216,550	232,690	60,720
Renfrew..... "	3,386	2,400	352,796	941,063	1,105,259	142,097	21,160
Totals... {1908	15,312	5,002	1,630,051	4,084,463	4,987,664	520,176	126,400
{1907	15,248	4,786	.....	.....	4,877,689	528,463	113,384
RUSSELL:							
Cambridge.....Tp.	3,232	59,707	827,596	264,980	1,053,676	.....	.....
Clarence..... ... "	5,158	70,148	831,933	304,445	1,110,078	5,750	.....
Cumberland..... "	3,826	74,374	1,381,971	316,470	1,659,341	9,283	.....
Russell..... ..... "	3,618	46,614	1,014,452	657,133	1,576,085	9,475	.....
Totals... {1908	15,834	250,843	4,055,952	1,543,028	5,399,180	24,508	.....
{1907	15,186	250,667	.....	.....	5,523,508	29,770	100

EXEMPTIONS AND TAXATION.—*Continued.*

Total.	Assessed for schools only.	Exempt from taxes or liable for local improvement only.	Taxes imposed. Municipal.	School.	Total.	Total per head.	Mills on $.	Municipalities.
$	$	$	$	$	$	$ c.		RAINY RIVER—*Con.*
161,010	5,450	4,825	1,957	1,636	3,593	8 00	22.3	Morley and Patullo.
148,251	.....	1,198	657	1,844	2,501	8 45	16.9	Worthington.
1,535,321	61,618	24,158	18,802	17,955	36,757	10 11	23.9	Totals.
1,474,499	71,531	.....	13,102	15,117	28,219	8 00	19 1	
1,020,382	7,960	57,960	12,743	4,760	17,503	11 68	17.2	Fort Frances.
717,567	218,057	36,316	8,471	6,240	14,711	10 15	20.5	Rainy River.
1,737,949	226,017	94,276	21,214	11,000	32,214	10 93	18.5	Totals.
1,828,535	.....	.....	23,320	11,389	34,709	12 00	19.0	
								RENFREW:
783,265	.....	15,160	3,208	4,347	7,555	3 78	9.6	Admaston.
98,030	.....	7,200	586	865	1,451	1 81	14.8	Algona S.
574,300	.....	8,565	1,623	3,272	4,895	2 53	8.5	Alice and F.
152,271	.....	12,525	2,580	2,367	4,947	4 03	32.5	Bagot and B.
1,395,440	.....	62,900	3,607	4,573	8,180	4 18	5.9	Bromley.
80,020	.....	†2,200	247	592	839	1 57	10.5	Brougham.
189,275	.....	925	2,038	2,963	2 65	15.7	Brudenell and L.	
305,330	.....	†8,400	1,291	3,119	4,410	2 36	14.4	Grattan.
57,815	.....	4,175	395	605	1,000	1 80	17.3	Griffith and M.
480,870	.....	13,000	3,091	5,204	8,295	2 67	17.2	Hagarty, etc.
66,310	.....	3,400	631	433	1,064	4 45	16.0	Head, etc.
535,773	.....	8,430	2,142	2,838	4,980	3 49	9.3	Horton.
1,175,538	.....	27,600	7,602	7,844	15,446	4 39	13.1	McNab.
307,289	.....	3,475	1,062	1,388	2,450	2 46	8.0	Pembroke.
83,906	.....	4,600	537	1,004	1,541	2 00	18.4	Petewawa, etc.
45,700	.....	2,800	562	757	1,319	3 44	28.9	Radcliffe.
62,275	.....	3,640	651	1,894	2,545	3 64	40.9	Raglan.
158,974	.....	4,400	994	1,852	2,846	2 97	17.9	Rolph, etc.
890,200	.....	15,675	3,804	5,919	9,723	4 78	10.9	Ross.
56,660	.....	720	455	813	1,268	1 99	22.4	Sebastopol.
699,792	.....	6,900	1,819	2,136	3,955	3 68	5.7	Stafford.
1,737,848	.....	54,480	6,837	7,997	14,834	4 66	8.5	Westmeath.
531,005	.....	8,990	2,432	4,070	6,502	2 96	12.2	Wilberforce, etc.
10,467,886	.....	292,485	47,081	65,927	113,008	3 40	10.8	Totals.
10,627,444	2,192	.....	49,038	62,844	111,882	3 41	10.5	
288,629	.....	18,800	1,215	2,137	3,352	4 05	11.6	Cobden.
346,908	.....	101,950	4,743	3,007	7,750	6 80	22.3	Eganville.
1,190,227	.....	71,500	26,620	12,581	39,201	9 57	32.9	Arnprior.
2,539,960	.....	346,000	32,186	17,780	49,966	8 52	19.7	Pembroke.
1,268,516	59,450	188,600	18,599	11,923	30,522	9 01	24.1	Renfrew.
5,634,240	59,450	726,850	83,363	47,428	130,791	8 54	23.2	Totals.
5,549,536	58,000	.....	77,575	43,497	121,072	7 94	21.8	
								RUSSELL:
1,053,676	.....	†38,900	8,511	6,426	11,937	4 48	14.2	Cambridge.
1,115,828	.....	26,300	9,641	10,826	20,467	3 97	18.3	Clarence.
1,668,624	.....	39,100	13,331	11,078	24,409	6 38	14.6	Cumberland.
1,585,560	.....	95,500	14,605	9,091	23,696	6 55	14.9	Russell.
5,423,688	.....	199,800	46,088	37,421	83,509	5 27	15.4	Totals.
5,553,378	.....	.....	46,288	33,027	79,315	5 22	14.3	

POPULATION, AREA, ASSESSMENT,

Municipalities.	Assessed population, 1908.	Area assessed.	Real property.		Assessed values.		
			Excluding buildings.	Buildings.	Real property.	Business assessment.	Income.
RUSSELL—*Con.*	No.	Acres.	$	$	$	$	$
Casselman.....Vill.	775	1,200	41,442	99,053	117,395	6,650	.....
Rockland.....Tn.	2,808	700	69,125	333,295	302,020	260	.....
Totals... 1908	3,583	1,900	110,567	432,348	419,415	6,910	.....
Totals... 1907	3,380	1,900	.....	.....	258,053	7,228	.....
SIMCOE:							
Adjala.....Tp.	2,055	45,482	†578,437	†290,288	‡817,525	‡3,750	‡500
Essa..... "	2,954	67,257	1,016,271	321,075	1,319,176	9,100	2,900
Flos..... "	3,150	63,863	1,199,762	467,835	1,634,822	22,823	2,330
Gwillimbury W.... "	2,163	46,842	928,795	219,705	1,119,300	2,730	.....
Innisfil..... "	3,268	68,759	1,263,414	423,560	1,672,199	800	1,481
Matchedash..... "	444	19,276	87,512	37,585	120,917	.....	.....
Medonte..... "	3,872	62,304	681,423	399,306	1,035,329	8,681	2,000
Nottawasaga..... "	4,592	90,191	1,867,729	751,510	2,558,039	8,100	600
Orillia..... "	3,940	72,615	395,062	274,312	652,199	16,030	2,550
Oro..... "	3,326	73,218	1,086,752	517,805	1,570,557	3,850	.....
Sunnidale..... "	2,316	58,110	587,281	306,065	871,246	3,895	.....
Tay..... "	5,672	48,023	669,715	744,095	1,372,510	97,425	7,100
Tecumseth..... "	3,202	65,848	1,201,645	584,385	1,718,515	4,700	4,500
Tiny..... "	3,620	77,628	762,268	320,606	1,057,344	2,800	.....
Tossorontio..... "	1,503	44,663	566,314	202,235	744,149	3,825	.....
Vespra..... "	2,462	63,590	821,645	308,265	1,099,910	7,450	.....
Totals... 1908	48,539	967,669	13,714,025	6,171,642	19,393,737	195,959	23,961
Totals... 1907	49,134	969,427	.....	.....	19,477,083	247,479	52,524
Beeton.....Vill.	721	475	39,950	145,130	163,380	20,845	1,823
Bradford..... "	1,023	1,700	68,275	213,585	253,460	20,780	4,645
Coldwater..... "	867	350	57,516	163,900	201,166	22,902	18,390
Creemore..... "	691	470	37,105	150,845	176,950	22,544	1,525
Tottenham..... "	606	400	43,975	167,400	184,625	14,050	1,300
Alliston.....Tn	1,357	500	105,138	394,409	454,547	40,729	4,633
Barrie..... "	6,812	2,550	922,570	2,260,450	2,873,920	253,773	47,319
Collingwood..... "	6,995	4,440	1,001,314	1,911,314	2,615,038	244,606	26,600
Midland..... "	4,105	567	603,620	796,985	1,230,605	104,705	89,098
Orillia..... "	5,571	1,600	†587,797	†1,109,188	1,672,395	189,775	39,315
Penetanguishene... "	3,210	1,717	244,685	1,081,870	787,555	128,693	9,207
Stayner..... "	1,096	1,162	67,189	262,396	290,585	26,659	3,270
Totals... 1908	33,054	15,931	3,779,134	8,657,472	10,903,226	1,090,061	247,125
Totals... 1907	32,086	15,596	.....	.....	10,066,297	1,090,192	213,716
STORMONT:							
Cornwall..... ....Tp.	5,520	63,650	779,147	569,580	1,240,877	7,300	.....
Finch..... "	2,855	50,482	†696,962	†506,308	1,153,270	12,620	.....
Osnabruck..... "	4,762	62,040	1,117,690	929,110	2,014,000	14,050	1,270
Roxborough..... "	3,800	73,825	†998,000	†724,501	1,651,501	91,183	.....
Totals... 1908	16,937	249,997	3,591,799	2,729,499	6,059,648	128,153	1,270
Totals... 1907	17,321	247,151	.....	.....	6,181,141	58,903	2,301
Finch.....Vill.	392	467	†20,828	†64,345	82,073	4,375	.....
Cornwall.....Tn.	6,276	680	583,940	1,830,150	2,014,390	154,841	44,708
Totals... 1908	6,668	1,147	604,768	1,894,495	2,096,463	159,216	44,708
Totals... 1907	6,568	1,133	.....	.....	1,931,210	129,707	35,000

‡ Taken from 1907 returns, as 1908 has not yet been received.

EXEMPTIONS AND TAXATION.—*Continued.*

Total.	Assessed for schools only.	Exempt from taxes or liable for local improvement only.	Taxes imposed: Municipal.	School.	Total.	Total per head.	Mills on $.	Municipalities.
$	$	$	$	$	$	$		RUSSELL—*Con.*
124,045	.....	23,100	1,390	736	2,126	2 74	17.1	Casselman.
302,280	.....	100,400	2,048	7,710	9,758	3 48	32.3	Rockland.
426,325	.....	123,500	3,438	8,446	11,884	3 32	27.9	Totals.
265,281	.....	.....	3,907	7,281	11,188	3 31	42.2	
								SIMCOE:
‡851,775	.....	†21,200	‡6,729	‡4,475	‡11,204	5 45	13.2	Adjala.
1,331,176	.....	21,170	11,378	8,528	19,906	6 74	15.0	Essa.
1,659,975	.....	32,775	13,933	9,032	22,965	7 29	13.8	Flos.
1,122,030	.....	29,200	7,746	7,404	15,150	7 00	13 5	Gwillimbury W.
1,674,480	.....	14,775	13,688	8,076	21,764	6 66	13.0	Innisfil.
120,917	.....	4,190	750	822	1,572	3 54	13.0	Matchedash.
1,046,010	.....	45,400	9,681	8,603	18,284	4 72	17.5	Medonte.
2,566,739	....	61,200	16,300	13,013	29,313	6 38	11.4	Nottawasaga.
670,779	.....	17,175	9,675	8,348	18,023	4 57	26.9	Orillia.
1,574,407	.....	34,000	8,513	9,709	18,222	5 48	11.6	Oro.
875,141	.....	22,100	7,441	5,600	13,041	5 63	14.9	Sunnidale.
1,477,035	.....	41,300	6,448	11,495	17,943	3 16	12.1	Tay.
1,727,715	.....	67,515	15,491	7,958	23,449	7 32	13.6	Tecumseth.
1,060,144	.....	25,530	11,699	7,679	19,378	5 35	18.3	Tiny.
747,974	.....	24,400	3,960	3,847	7,807	5 19	10.4	Tossorontio.
1,107,360	.....	30,000	6,981	8,086	15,067	6 12	13.6	Vespra.
19,613,657	.....	491,930	150,413	122,675	273,088	5 63	18.9	Totals.
19,777,086	.....	.....	137,368	121,473	258,841	5 27	13.1	
186,048	9,300	21,700	3,469	1,440	4,909	6 81	26.4	Beeton.
278,885	.....	28,400	4,570	3,041	7,611	7 44	27.3	Bradford.
242,458	.....	20,250	2,969	1,444	4,413	5 09	18.2	Coldwater.
200,019	.....	12,000	2,997	1,677	4,674	6 76	23.4	Creemore.
199,975	.....	26,750	2,210	1,407	3,617	5 97	18.1	Tottenham.
499,909	.....	45,000	7,784	3,789	11,573	8 53	23.2	Alliston.
3,175,012	53,920	309,100	38,038	22,978	61,016	8 96	19.2	Barrie.
2,886,244	39,500	297,590	64,547	22,407	86,954	12 43	30.1	Collingwood.
1,424,408	70,000	170,000	24,773	17,284	42,057	10 25	29.5	Midland.
1,901,485	.....	24,590	29,127	19,389	48,516	8 71	25.5	Orillia.
925,455	88,630	539,000	14,946	11,651	26,597	8 29	28.7	Penetanguishene.
320,514	715	39,000	5,275	3,053	8,328	7 60	26.0	Stayner.
12,240,412	262,065	1,533,380	200,705	109,560	310,265	9 08	24.5	Totals.
11,370,205	195,775	.....	174,032	99,577	273,609	8 53	24.1	
								STORMONT:
1,248,177	5,000	107,850	22,215	10,770	32,985	5 98	26.4	Cornwall.
1,165,890	.....	†50,000	16,288	7,311	23,599	8 27	20.2	Finch.
2,029,320	.....	32,800	14,922	10,426	25,348	5 32	12.5	Osnabruck.
1,745,684	....	†71,000	19,648	9,305	28,953	7 62	16.6	Roxborough.
6,189,071	5,000	261,650	73,073	37,812	110,885	6 55	17.9	Totals.
6,242,345	5,000	... .	66,929	40,796	107,725	6 22	17.3	
86,448	....	3,100	1,151	553	1,704	4 35	19.7	Finch.
2,213,939	72,600	399,700	38,807	18,073	56,880	9 06	25.7	Cornwall.
2,300,387	72,600	402,800	39,958	18,626	58,584	8 79	25.5	Totals.
2,095,917	85,900	.....	38,816	15,960	54,776	8 34	26.1	

POPULATION, AREA, ASSESSMENT,

Municipalities.	Assessed population, 1908.	Area assessed.	Real Property.		Assessed values.		
			Excluding buildings.	Buildings.	Real property.	Business assessment.	Income.
SUDBURY:	No.	Acres.	$	$	$	$	$
Balfour ..... Tp.	866	22,026	101,870	53,490	147,660	.....	.....
Blezard ..... "	368	17,210	83,851	38,490	111,611	.....	.....
Casimer, etc. ..... "	664	33,804	84,996	33,747	97,143	.....	.....
Chapleau ..... "	690	5,760	36,027	204,153	190,180	11,817	91,737
Drury, etc. ..... "	1,468	43,708	91,819	160,490	246,409	3,050	97,440
Hagar ..... "	250	12,092	26,329	18,760	43,039	2,145	.....
Hallam ..... "	269	17,257	36,255	13,270	48,675	.....	.....
Hanmer ..... "	801	15,086	42,598	8,425	48,923	.....	.....
McKim ..... "	205	17,051	83,911	53,438	127,529	.....	.....
Martland ..... "	390	17,876	37,865	11,708	45,723	1,300	.....
Nairn and L ..... "	292	18,802	22,378	35,359	53,737	3,611	.....
Neelon and G. ..... "	461	31,191	56,033	29,535	83,168	.....	.....
Ratter and D ..... "	1,064	36,457	114,485	76,170	183,355	8,438	.....
Rayside ..... "	802	19,346	74,905	29,766	103,671	.....	.....
Salter, etc ..... "	700	39,440	103,425	45,590	146,265	.....	.....
Waters ..... "	195	12,045	36,522	9,925	45,722	.....	.....
Totals 1908	9,485	359,151	1,033,269	822,316	1,722,840	30,361	189,177
Totals 1907	9,282	314,064	.....	.....	1,518,407	26,417	147,999
Copper Cliff ..... Tn.	2,548	1,485	7,424	381,341	362,765	104,100	55,125
Massey ..... "	900	725	120,790	58,178	165,968	16,903	950
Sudbury ..... "	4,004	2,560	540,017	600,700	970,217	125,756	.....
Webbwood ..... "	739	743	67,290	85,360	141,150	13,000	2,200
Totals 1908	8,191	5,513	735,521	1,128,579	1,640,100	259,759	58,275
Totals 1907	7,376	5,488	.....	.....	1,552,845	245,547	46,950
THUNDER BAY:							
Neebing ..... Tp.	99	107,419	421,699	7,210	416,609	795	.....
O'Connor ..... "	120	26,880	44,773	25,672	64,445	.....	.....
Oliver ..... "	533	36,135	222,175	57,895	266,481	700	.....
Paipoonge ..... "	558	44,764	280,670	34,780	306,500	.....	.....
Schreiber ..... "	873	420	15,790	141,070	141,260	9,408	83,510
Shuniah ..... "	231	101,678	324,235	7,440	330,075	.....	.....
Totals 1908	2,417	317,296	1,309,342	274,067	1,525,370	10,903	83,510
Totals 1907	2,099	312,039	.....	.....	1,191,949	8,850	73,983
Fort William City .. 1908	15,773	9,865	6,109,962	4,195,135	7,422,797	881,195	8,100
Fort William City .. 1907	13,882	8,600	.....	.....	5,701,488	541,462	83,320
Port Arthur City .. 1908	11,520	10,260	6,287,693	4,783,350	7,018,663	433,970	34,530
Port Arthur City .. 1907	13,576	10,000	.....	.....	6,695,119	418,127	36,600
VICTORIA:							
Bexley ..... Tp.	772	28,326	120,270	112,550	222,520	5,531	.....
Carden ..... "	628	44,620	190,170	48,535	226,705	.....	.....
Dalton ..... "	464	28,314	97,895	17,530	109,425	100	.....
Eldon ..... "	2,449	61,315	1,168,639	410,897	1,544,036	15,882	.....
Emily ..... "	1,869	59,690	1,285,516	386,320	1,650,186	1,200	400
Fenelon ..... "	2,050	51,306	853,525	250,560	1,078,760	4,350	325
Laxton, Digby, etc. "	650	73,740	133,195	48,290	176,985	.....	.....
Mariposa ..... "	3,216	74,955	2,686,885	831,074	3,448,809	16,090	5,313
Ops ..... "	1,997	56,313	1,755,625	421,770	2,117,745	7,490	.....

EXEMPTIONS AND TAXATION.—*Continued.*

Total.	Assessed for schools only.	Exempt from taxes or liable for local improvement only.	Taxes imposed. Municipal.	School.	Total.	Total per head.	Mills on $.	Municipalities.
$	$	$	$	$	$	$ c.		SUDBURY:
147,660	.....	7,700	1,652	3,748	5,400	6 24	36.6	Balfour.
111,641	.....	10,700	1,288	713	2,001	5 44	17.9	Blezard.
97,143	.....	21,600	545	1,103	1,648	2 48	17.0	Casimer, etc.
293,734	.....	50,000	1,249	3,451	4,700	6 81	16.0	Chapleau.
346,899	.....	5,900	3,466	4,306	7,772	5 29	22.4	Drury, etc.
45,184	1,470	2,050	572	528	1,100	4 40	24.3	Hagar.
48,675	1,600	850	413	564	977	3 63	20.1	Hallam.
48,923	.....	2,100	979	846	1,825	2 28	37.3	Hanmer.
127,529	.....	†9,820	1,600	1,036	2,636	12 86	20.7	McKim.
47,023	1,984	3,850	357	540	897	2 30	19.1	Martland.
57,348	.....	4,000	953	509	1,462	5 01	25.5	Nairn and Lorne.
83,168	.....	2,400	1,663	2,051	3,714	8 06	44.7	Neelon and Garson.
191,793	.....	7,300	711	2,306	3,017	2 84	15.7	Ratter and Dunnett.
103,671	.....	1,000	1,099	1,629	2,728	3 40	26.3	Rayside.
146,265	.....	2,750	1,177	2,290	3,467	4 95	23.7	Salter, etc.
45,722	850	725	658	457	1,115	5 72	24.4	Waters.
1,942,378	5,904	132,745	18,382	26,077	44,459	4 69	22.9	Totals.
1,692,823	1,495	.....	17,578	20,534	38,112	4 11	22.5	
521,990	.....	29,000	5,039	8,248	13,287	5 21	25.5	Copper Cliff.
183,821	.....	13,000	2,493	3,666	6,159	6 84	33.5	Massey.
1,095,973	.....	170,500	16,537	14,134	30,671	7 66	28.0	Sudbury.
156,350	.....	11,500	1,251	2,189	3,440	4 65	22.0	Webbwood.
1,958,134	.....	224,000	25,320	28,237	53,557	6 54	27.4	Totals
1,845,342	.....	.....	26,300	22,490	48,790	6 61	26.4	
								THUNDER BAY:
417,404	.....	12,300	7,969	None.	7,969	80 49	19.1	Neebing.
64,445	.....	6,000	1,759	781	2,540	21 17	39.4	O'Connor.
267,181	70,250	13,589	3,521	875	4,399	8 25	16.5	Oliver.
306,500	11,570	8,950	4,028	2,519	6,547	11 73	21.4	Paipoonge.
234,178	.....	15,600	1,043	3,278	4,321	4 95	18.5	Schreiber.
330,075	.....	1,600	4,044	1,138	5,182	22 15	15.7	Shuniah.
1,619,783	81,820	58,039	22,367	8,591	30,958	12 81	19.1	Totals.
1,274,782	36,249	.....	16,312	8,985	25,297	12 05	19.8	
8,312,092	1,679,000	2,882,300	141,857	48,642	190,499	12 08	22.9	Fort William.
6,326,270	1,024,065	.....	99,789	27,962	127,751	9 20	20.2	
7,487,163	500,000	4,052,380	149,757	56,528	206,285	17 91	27.6	Port Arthur.
7,149,846	510,000	.....	90,359	43,256	133,615	9 84	18.7	
								VICTORIA:
228,051	.....	10,300	2,346	2,199	4,545	5 89	19.9	Bexley.
226,705	.....	12,000	1,220	2,250	3,470	5 53	15.3	Carden.
109,525	.....	6,000	2,833	1,116	3,949	8 51	36.1	Dalton.
1,559,918	.....	†35,500	7,413	6,784	14,197	5 80	9.1	Eldon.
1,651,786	.....	21,650	6,787	5,646	12,433	6 65	7.5	Emily.
1,083,435	.....	25,325	5,579	7,065	12,644	6 17	11.7	Fenelon.
176,985	.....	4,500	1,568	1,945	3,513	5 40	19.8	Laxton, Digby, etc.
3,470,212	.....	69,150	17,657	11,076	28,733	8 93	8.3	Mariposa.
2,125,235	.....	62,650	12,951	6,024	18,975	9 50	8.9	Ops.

POPULATION, AREA, ASSESSMENT,

Municipalities.	Assessed population, 1908.	Area assessed.	Real property.		Assessed values.		
			Excluding buildings.	Buildings.	Real property	Business assessment.	Income.
VICTORIA—*Con.*	No.	Acres.	$	$	$	$	$
Somerville ..... Tp.	1,794	64,183	170,699	83,833	245,730	8,050	650
Verulam..... "	1,821	55,524	712,718	214,174	909,192	4,450	.....
Totals 1908	17,710	598,286	9,175,137	2,828,533	11,730 093	63,143	6,688
Totals 1907	17,710	599,608	.....	.....	10,447,614	70,409	5,791
Bobcaygeon ..... Vill.	916	442	58,966	197,504	231,670	19,463	1,936
Fenelon Falls..... "	1,081	583	300,515	207,125	439,040	50,625	3,125
Omemee..... "	552	409	43,067	148,820	172,087	12,137	2,120
Sturgeon Point.... "	432	222	26,535	38,490	64,125	612	148
Woodville ..... "	405	458	43,389	104,325	126,214	10,555	300
Lindsay.....Tn.	7,634	1,550	826,810	1,844,940	2,258,750	279,775	42,225
Totals 1908	11,020	3,664	1,299,282	2,541,204	3,291,886	373,167	49,854
Totals 1907	10,652	3,598	.....	.....	3,063,370	350,099	38,176
WATERLOO:							
Dumfries N.....Tp.	1,896	44,328	1,254,557	803,815	2,042,372	25,150	1,240
Waterloo..... "	6,589	82,169	2,659,595	1,353,120	3,912,840	42,485	20,675
Wellesley..... "	4,461	66,583	2,308,565	1,529,815	3,733,210	48,400	9,480
Wilmot ..... "	4,550	60,816	1,931,818	1,047,980	2,914,673	39,606	18,120
Woolwich..... "	3,998	53,616	1,913,610	888,800	2,760,135	30,035	10,815
Totals.... 1908	21,494	307,512	10,068,145	5,623,530	15,363,230	185,676	60,330
Totals.... 1907	21,565	306,782	.....	.....	15,418,965	193,636	54,868
Ayr.....Vill.	812	500	57,865	244,185	264,300	25,439	10,971
Elmira..... "	1,610	527	120,665	404,580	475,795	69,515	17,420
New Hamburg.... "	1,462	950	107,095	363,145	435,190	54,074	9,005
Berlin.....Tn.	13,407	3,000	1,754,828	4,231,991	5,198,219	565,296	134,928
Galt ..... "	9,144	1,477	1,449,515	3,439,888	3,820,156	501,639	102,987
Hespeler..... "	2,567	454	156,210	631,550	750,560	110,450	14,220
Preston ..... "	3,240	1,300	280,540	850,209	1,054,749	112,355	35,575
Waterloo..... "	4,421	2,350	430.675	1,326,425	1,670,600	367,695	40,265
Totals.... 1908	36,663	10,558	4,357,393	11,491,973	13,669,569	1,806,463	365,371
Totals.... 1907	36,108	10,567	.....	.....	13,125,491	1,723,149	369,120
WELLAND:							
Bertie .....Tp.	3,067	35,078	1,065,809	761,160	1,758,869	15,655	5,700
Crowland ..... "	1,043	18,863	566,402	149,625	705,527	1,000	4,805
Humberstone..... "	2,919	30,849	654,530	354,965	985,170	19,875	19,325
Pelham ..... "	2,638	28,818	678,570	477,260	1,119,645	12,045	5,335
Stamford..... "	2,824	21,676	†1,010,800	†590,000	1,500,800	16,000	.....
Thorold..... "	1,806	23,929	518,602	246,195	721,517	4,573	3,100
Wainfleet..... "	2,507	50,813	852,303	288,780	1,124,028	8,910	5
Willoughby..... "	848	18,864	414,646	107,828	512,474	950	.....
Totals.... 1908	17,652	228,890	5,761,662	2,975,813	8,428,030	79,008	38,270
Totals.... 1907	16,838	227,421	.....	.....	8,143,080	91,853	19,038
Bridgeburg.....Vill.	1,456	678	509,189	429,895	907,684	31,498	34,525
Chippawa..... "	620	166	72,145	94,320	163,165	7,700	681
Fort Erie. ..... "	1,214	678	197,855	236,390	405,785	13,180	4,920
Port Colborne.... "	1,538	255	123,056	303,710	394,161	41,411	20,975

EXEMPTIONS AND TAXATION.—*Continued.*

Total.	Assessed for schools only.	Exempt from taxes or liable for local improvement only.	Taxes imposed. Municipal.	School.	Total.	Total per head.	Mills on $	Municipalities.
$	$	$	$	$	$	$ c		VICTORIA—*Con.*
254,430	.....	8,802	3,485	4,341	7,826	4 36	30.8	Somerville.
913,642	.....	17,700	6,210	6,041	12,251	6 73	13.4	Verulam.
11,799,924	.....	273,577	68,049	54,487	122,536	6 92	10.4	Totals.
10,523,814	32,000	.....	69,367	54,010	123,377	6 97	11.7	
253,069	.....	24,800	4,695	2,205	6,900	7 53	27.3	Bobcaygeon.
492,790	.....	68,600	4,925	3,045	7,970	7 37	16.2	Fenelon Falls.
186,341	.....	19,800	1,887	1,537	3,424	6 20	18.4	Omemee.
64,885	.....	900	714	194	908	2 10	14.0	Sturgeon Point.
137,069	.....	21,500	1,302	798	2,100	5 19	15.3	Woodville.
2,580,750	50,200	413,000	55,444	23,153	78,597	10 30	30.5	Lindsay.
3,714,907	50,200	548,600	68,967	30,932	99,899	9 07	26.9	Totals.
3,451,645	51,200	.....	67,459	31,143	98,602	9 26	28.6	
								WATERLOO:
2,068,762	.....	16,000	8,990	5,204	14,194	7 49	6.9	Dumfries N.
3,976,000	.....	99,875	16,674	19,568	36,242	5 50	9.1	Waterloo.
3,791,090	.....	105,170	22,796	14,777	37,573	8 42	9.9	Wellesley.
2,972,399	.....	65,125	12,038	14,779	26,817	5 89	9.0	Wilmot.
2,800,985	.....	42,275	14,304	11,158	25,462	6 37	9.1	Woolwich.
15,609,236	.....	328,445	74,802	65,486	140,288	6 53	9.0	Totals.
15,666,469	.....	.....	65,928	67,261	133,189	6 18	8.5	
300,710	.....	37,750	2,487	2,415	4,902	6 04	16.3	Ayr.
562,730	40,520	49,450	6,949	1,758	8,707	5 41	15.5	Elmira.
498,269	.....	35,050	6,842	3,100	9,942	6 80	20.0	New Hamburg.
5,898,443	166,750	788,600	91,797	37,399	129,196	9 64	21.9	Berlin.
4,424,782	118,110	1,069,247	79,164	34,320	113,484	12 41	25.6	Galt.
875,230	.....	37,200	12,761	5,897	18,658	7 27	21.3	Hespeler.
1,202,679	51,500	76,000	16,729	8,423	25,152	7 76	20 9	Preston.
2,078,560	100,810	86,500	35,926	10,420	46,346	10 48	22.3	Waterloo.
15,841,403	477,690	2,179,797	252,655	103,732	356,387	9 72	22.5	Totals.
15,217,760	400,400	.....	232,385	98,272	330,657	9 16	21.7	
								WELLAND:
1,780,224	.....	68,100	14,437	7,786	22,223	7 25	12.5	Bertie.
711,332	120,000	10,500	4,376	3,228	7,604	7 29	10.7	Crowland.
1,024,370	2,100	24,325	6,302	6,498	12,800	4 39	12.5	Humberstone.
1,137,025	.....	36,185	7,066	5,385	12,451	4 72	11.0	Pelham.
1,516,800	.....	100,000	10,363	7,824	18,187	6 44	12.0	Stamford.
729,190	20,000	43,280	4,816	5,272	10,088	5 59	13.8	Thorold.
1,132,943	6,000	17,055	9,977	5,702	15,679	6 25	13.8	Wainfleet.
513,424	.....	10,000	2,826	2,289	5,115	6 03	10.0	Willoughby.
8,545,308	148,100	309,445	60,163	43,984	104,147	5 90	12.2	Totals.
8,253,971	6,000	.....	57,339	44,416	101,755	6 04	12.3	
973,707	.....	31,400	9,715	6,078	15,793	10 85	16.2	Bridgeburg.
171,546	.....	3,300	1,714	1,250	2,964	4 78	17.3	Chippawa.
423,885	.....	28,460	6,757	1,911	8,668	7 14	20.4	Fort Erie.
456,547	7,600	32,605	5,713	2,968	8,681	5 64	19.0	Port Colborne.

POPULATION, AREA, ASSESSMENT

Municipalities.	Assessed population, 1908.	Area assessed.	Real property.		Assessed values.		
			Excluding buildings.	Buildings.	Real property.	Business assessment.	Income.
	No.	Acres.	$	$	$	$	$
WELLAND.—*Con.*							
Thorold ..... Tn.	2,141	780	172,517	661,500	718,117	114,265	18,085
Welland ..... "	3,958	800	483,765	1,426,325	1,793,740	292,875	54.185
Totals 1908	10,927	3,357	1,558,527	3,152,140	4,382,652	500,929	133,371
1907	10,014	3,386	.....	.....	3,779,236	460,374	121,068
*Niagara Falls City 1908	7,087	1,655	1,273,262	3,025.356	3,871,018	278,351	13,800
1907	8,976	1,352	.....	.....	3,684,210	254,295	20,500
WELLINGTON:							
Arthur ..... Tp.	2,503	64,482	1,847,558	668,630	2,467,813	4,575	100
Eramosa ..... "	2,499	44,524	1,325,739	773,355	2,058,094	25,806	5,900
Erin ..... "	3,004	70,640	1,488,810	642,785	2,104,395	7,340	.....
Garafraxa W. ..... "	2,024	47,726	1,389,475	324,300	1,700,675	3,075	1,950
Guelph ..... "	2,225	36,648	1,419,250	1,079,840	1,918,990	40,550	25,000
Luther W. ..... "	1,864	49,837	1,149,007	371,175	1,491,782	5,600	.....
Maryborough ..... "	2,484	56,428	1,732,416	672,090	2,377,506	13,220	.....
Minto ..... "	2,790	69,341	1,736,701	704,025	2,421,051	9,115	.....
Nichol ..... "	1,532	26,826	844,535	481,700	1,292,140	10,385	6,000
Peel ..... "	3,423	74,533	2,071,415	827,455	2,871,490	7,025	4,480
Pilkington ..... "	1,187	29,066	960,510	352,945	1,299,825	402	1,000
Puslinch ..... "	2,698	58,524	913,482	615,350	1,460,022	11,560	1,700
Totals 1908	28,233	628,575	16,878,898	7,513,650	23,463,783	138,653	46,130
1907	28,277	628,472	.....	.....	23,450,712	140,016	43,520
Arthur. ..... Vill.	1,209	994	96,850	331,195	347,945	37,000	13,705
Clifford ..... "	595	440	30,245	149,950	160,795	13,960	2,000
Drayton ..... "	842	431	50,155	248,310	261,265	27,856	900
Elora ..... "	1,111	600	76,495	332,825	345,620	31,150	12,350
Erin ..... "	503	456	36,775	106,975	131,250	13,385	.....
Fergus ..... "	1,410	850	353,020	183,140	459,360	40,960	10,030
Harriston ..... Tn.	1.609	852	102,670	443.115	471,685	55,723	5,400
Mount Forest .... "	2,309	1,414	227,205	591,515	674,920	72,139	18,900
Palmerston ..... "	1,947	950	144,021	434,635	532.223	51,996	7,459
Totals 1908	11,535	6,987	1,117,436	2,821,660	3,385,063	344,169	70,744
1907	11,706	7,025	.....	.....	3,331,799	355,792	83,739
Guelph City 1908	14,060	3,200	2,376,770	4,570,270	5,335,340	677,750	54,650
1907	13,700	3,200	.....	.....	4,815,840	575,400	49,690
WENTWORTH:							
Ancaster ..... Tp.	3,849	45,700	1,782,239	614,385	2,296,624	12,170	4,900
Barton. ..... "	5,693	12,703	985,137	875,400	1,585,037	14,325	21,305
Beverly ..... "	3,593	69,845	1,888,773	914,590	2,769,508	7,375	200
Binbrook ..... "	1,159	26,359	835,562	189,185	1,005,747	4,565	.....
Flamborough E ... "	2,298	33,009	1,163,000	505,800	1,641,700	5,000	.....
Flamborough W... "	2,690	31,113	1,078,400	653.245	1,663,445	15,075	3,675
Glanford ..... "	1,412	23,537	802,350	270,688	1,045,438	34,125	3,500
Saltfleet ..... "	3,340	28,254	1,397,971	836,809	2,075,080	18,775	3,470
Totals 1908	24,034	270,520	9,843,432	4,860,102	14,082,579	111,410	37,050
1907	22,715	270,750	.....	.....	13,999,013	96,662	43,803

EXEMPTIONS AND TAXATION.—*Continued.*

Total.	Assessed for schools only.	Exempt from taxes or liable for local improvement only.	Taxes imposed. Municipal.	School.	Total.	Total per head.	Mills on $.	Municipalities.
$	$	$	$	$	$	$ c		
								WELLAND—*Con.*
850,467	72,000	115,900	18,696	4,282	22,978	10 73	27.0	Thorold.
2,140,800	486,080	116,350	29,802	12,948	42,750	10 80	20.0	Welland.
5,016,952	565,680	328,015	72,397	29,437	101,834	9 32	20.3	Totals.
4,360,678	574,105	.....	71,414	21,764	93,178	9 30	21.4	
4,163,169	386,675	427,600	84,702	29,385	114,087	16 10	27.4	*Niagara Falls.
3,959,005	318,800	.....	80,648	27,880	108,528	12 09	27.4	
								WELLINGTON:
2,472,488	.....	48,375	9,523	8,847	18,370	7 34	7.4	Arthur.
2,089,800	.....	†41,000	9,041	6,820	15,861	6 35	7.6	Eramosa.
2,111,735	.....	27,200	7,768	9,249	17,017	5 66	8.1	Erin.
1,705,700	.....	13,100	9,676	5,803	15,479	7 65	9.1	Garafraxa W.
1,984,540	.....	580,100	9,593	5,821	15,414	6 93	7.8	Guelph.
1,497,382	.....	28,400	7,902	7,235	15,137	8 12	10.1	Luther W.
2,390,726	.....	27,000	11,383	9,710	21,093	8 49	8.8	Maryborough.
2,430,166	.....	19,675	13,081	7,555	20,636	7 40	8.5	Minto.
1,308,525	.....	34,095	5,149	3,994	9,143	5 97	7 0	Nichol.
2,882,995	.....	27,380	13,465	10,928	24,393	7 13	8.5	Peel.
1,301,227	.....	13,630	5,272	4,094	9,366	7 89	7.2	Pilkington
1,473,282	.....	68,810	8,055	6,120	14,175	5 25	9.6	Puslinch.
23,648,566	.....	928,765	109,908	86,176	196,084	6 95	8.3	Totals.
23,634,248	.....	.....	100,801	88,475	189,276	6 69	8.0	
398,650	.....	80,100	4,818	3,805	8,623	7 13	21.6	Arthur.
176,755	.....	19,400	1,622	1,229	2,851	4 79	16.1	Clifford.
290,021	.....	37,200	3,251	2,520	5,771	6 85	19.9	Drayton.
389,120	18,020	63,700	5,072	4,169	9,241	8 32	23.7	Elora.
144,635	.....	12,500	973	796	1,769	3 52	12.2	Erin.
510,350	.....	76,800	5,807	5,512	11,319	8 03	22.2	Fergus.
532,808	40,320	74,100	10,064	5,008	15,072	9 37	28 3	Harriston.
765,959	20,000	143,800	13,277	5,667	18,944	8 20	24.7	Mount Forest.
591,678	34,176	46,433	13,935	5,907	19,842	10 19	33.5	Palmerston.
3,799,976	112,516	554,033	58,819	34,613	93,432	8 10	24.6	Totals.
3,771,330	135,216	.....	59,099	33,335	92,434	7 90	24.5	
6,067,740	185,100	1,611,700	29,217	45,919	75,136	5 34	12.4	*Guelph.
5,440,930	115,000	.....	54,640	39,416	94,056	6 87	17.3	
								WENTWORTH:
2,313,694	.....	†100,000	15,958	7,465	23,423	6 09	10 1	Ancaster.
1,620,667	.....	275,500	10,850	10,489	21,339	3 75	13.2	Barton.
2,777,083	.....	33,855	15,131	8,742	23,873	6 64	8.6	Beverly.
1,010,312	.....	19,000	8,052	1,202	9,254	7 98	9.2	Binbrook.
1,646,700	.....	27,100	11,042	5,310	16,352	7 12	9.9	Flamborough E.
1,682,195	.....	68,200	9,670	5,447	15,117	5 62	9.0	Flamborough W.
1,083,063	.....	27,600	5,684	1,905	7,589	5 37	7.0	Glanford.
2,097,325	.....	69,700	17,084	9,399	26,483	7 93	12.6	Saltfleet.
14,231,039	.....	620,955	93,471	49,959	143,430	5 97	10.1	Totals.
14,139,178	.....	.....	85,237	44,424	129,661	5 71	9.2	

POPULATION, AREA, ASSESSMENT,

Municipalities.		Assessed population, 1908.	Real property. Area assessed.	Real property. Excluding buildings.	Real property. Buildings.	Assessed values. Real property.	Assessed values. Business assessment.	Assessed values. Income.
WENTWORTH—*Con.*		No.	Acres.	$	$	$	$	$
Waterdown	Vill.	773	304	42,945	131,150	165,845	11,455	1,650
Dundas	Tn.	4,014	550	289,195	1,197,725	1,122,420	115,175	72,700
Totals	1908	4,817	854	332,140	1,328,875	1,288,265	126,630	74,350
	1907	4,543	859	.....	.....	1,245,070	111,035	79,550
*Hamilton City	1908	66,967	6,030	13,855,219	22,188,858	31,789,977	4,125,295	1,254,495
	1907	64,067	3,990	.....	.....	29,114,343	3,848,990	1,239,250
YORK:								
Etobicoke	Tp.	4,979	28,791	1,581,874	966,057	2,189,316	45,395	46,535
Georgina	"	1,542	35,180	619,250	315,060	904,895	9,950	1,500
Gwillimbury E	"	3,270	59,132	880,515	469,385	1,329,725	13,950	3,050
Gwillimbury N	"	1,454	31,543	695,370	308,550	983,320	8,580	.....
King	"	4,755	88,132	1,784,265	1,123,425	2,857,090	15,590	.....
Markham	"	5,070	67,255	2,549,581	830,725	3,242,531	21,175	800
Scarborough	"	3,307	42,608	1,935,001	372,460	2,257,361	5,300	9,812
Vaughan	"	4,018	67,039	2,355,900	629,850	2,935,150	10,650	2,500
Whitchurch	"	2,951	60,080	1,178,569	500,025	1,631,194	1,515	.....
York	"	17,178	57,500	5,832,446	3,594,012	8,901,458	54,840	54,650
Totals	1908	48,524	537,260	19,412,771	9,109,549	27,232,040	186,945	118,847
	1907	46,664	537,059	.....	.....	26,481,713	202,022	108,995
Holland Landing	Vill.	380	1,878	37,240	36,370	66,110	2,300	900
Markham	"	922	475	71,495	257,135	255,130	22,860	9,900
Richmond Hill	"	690	466	64,585	152,020	160,305	10,180	4,600
Stouffville	"	1,048	394	77,050	277,625	335,025	25,297	2,300
Sutton	"	654	484	62,320	175,220	224,140	15,165	3,450
Weston	"	1,502	243	248,088	309,690	522,278	27,015	12,400
Woodbridge	"	576	522	42,085	138,923	162,358	10,260	.....
Aurora	Tn.	1,663	1,100	120,010	380,595	463,605	34,840	7,857
East Toronto	"	4,781	550	699,460	1,253,425	1,825,610	54,785	46,950
Newmarket	"	2,931	743	208,150	639,280	768,855	72,764	35,331
Totals	1908	15,147	6,855	1,630,483	3,620,283	4,783,416	275,466	123,693
	1907	14,479	6,891	.....	.....	4,534,443	281,865	157,255
North Toronto Tn.	1908	3,565	2,500	953,380	708,370	1,586,250	19,270	30,450
	1907	3,004	2,500	.....	.....	1,375,063	14,385	23,800
*Toronto City	1908	287,201	14,484	89,578,966	112,598,221	173,103,815	23,836,525	9,621,810
	1907	272,600	10,989	.....	.....	155,468,825	21,812,697	8,016,285
*West Toronto City	1908	11,686	1,608	2,023,095	3,443,565	5,172,545	348,155	74,013
	1907	11,537	1,608	.....	.....	4,527,300	341,870	59,985

EXEMPTIONS AND TAXATION.—*Concluded.*

Total.	Assessed for schools only.	Exempt from taxes or liable for local improvement only.	Taxes imposed. Municipal.	School.	Total.	Total per head.	Mills on $.	Municipalities.
$	$	$	$	$	$	$ c		WENTWORTH—*Con.*
178,950	.....	8,250	1,771	975	2,746	3 55	15.3	Waterdown.
1,310,295	75,520	364,500	22,724	9,742	32,466	8 03	24.8	Dundas.
1,489,245	75,520	372,750	24,495	10,717	35,212	7 31	23.6	Totals.
1,435,655	71,670	.....	25,215	8,367	33,582	7 39	23.4	
37,169,769	737,799	4,254,100	576,097	197,186	773,283	11 55	20.8	*Hamilton
34,202,583	482,240	.....	608,092	118,014	726,106	11 33	21.2	
								YORK:
2,281,246	.....	358,615	20,623	17,586	38,209	7 67	16.7	Etobicoke.
916,345	.....	29,415	4,264	3,771	8,035	5 21	8.8	Georgina.
1,346,725	.....	20,175	8,892	8,496	17,388	5 32	12.9	Gwillimbury E.
991,900	.....	20,600	4,211	4,634	8,845	6 08	8.9	Gwillimbury N.
2,872,680	38,000	50,600	18,106	12,559	30,665	6 45	10.7	King.
3,264,506	.....	137,775	18,857	14,302	33,159	6 54	10.2	Markham.
2,272,473	.....	50,100	13,461	9,695	23,156	7 00	10.2	Scarborough.
2,948,300	.....	50,600	16,959	9,860	26,819	6 67	9.1	Vaughan.
1,632,709	9,900	47,400	8,654	7,783	16,437	5 57	10.1	Whitchurch.
9,010,948	14,000	525,000	82,310	68,379	150,689	8 77	16.7	York.
27,537,832	61,900	1,290,280	196,337	157,065	353,402	7 28	12.8	Totals.
26,792,730	57,400	.....	179,668	149,232	328,900	7 05	12.3	
69,310	.....	7,500	639	520	1,159	3 05	16.7	Holland Land'g.
287,890	.....	73,500	4,741	2,965	7,706	8 36	26.8	Markham.
175,086	.....	56,300	2,394	1,489	3,883	5 63	22.2	Richmond Hill.
362,622	.....	19,650	4,599	1,558	6,157	5 88	17.0	Stouffville.
242,757	.....	13,400	1,968	1,212	3,180	4 86	13.1	Sutton.
561,693	5,000	35,500	7,973	5,739	13,712	9 13	24.4	Weston.
172,618	.....	18,650	2,101	1,219	3,320	5 76	19.2	Woodbridge.
506,302	6,000	†37,000	6,853	5,120	11,973	7 20	23.6	Aurora.
1,927,345	.....	127,275	28,566	16,961	45,527	9 52	23.6	East Toronto.
876,950	40,800	78,575	15,286	7,653	22,939	7 83	26.2	Newmarket.
5,182,573	51,800	467,350	75,120	44,436	119,556	7 89	23.1	Totals.
4,973,560	60,550	.....	.....	38,469	120,137	8 30	24.2	
1,635,970	.....	75,500	28,872	11,015	39,887	11.19	24.4	*North
1,413,248	.....	.....	22,569	11,956	34,525	11.49	24.4	Toronto.
206,562,158	345,224	29,073,372	3,330,670	1,239,372	4,570,042	15 91	22.1	*Toronto.
185,297,806	213,059	.....	2,961,999	1,111,786	4,073,785	14 94	22.0	
5,594,715	1,024,165	294,115	84,291	53,240	137,531	11 77	24.6	*West Toronto.
4,929,155	971,995	.....	66,490	55,206	121,696	10 55	24.7	

ELECTRIC AND OTHER STREET LIGHTING PLANTS OPERATED BY MUNICIPALITIES IN 1907.

The following cities of Ontario owned and operated Gas or Electric Light Plants in the year 1907, aggregating in value $2,065,545.

Belleville	$113,614	Ottawa	$300,000
Chatham	20,000	Port Arthur	‡331,627
Fort William	*159,000	St. Thomas	234,466
Guelph	†377,066	West Toronto	15,000
Kingston	309,153	Windsor	27,000
Niagara Falls	108,000	Woodstock	70 619

* Including $45,000 for Telephone System. † Including $109,192 for Radial Railway.
‡ Including $202,780 for Street Railway, and $68,711 for Telephone System.

The following villages and towns in the Province of Ontario, owned and operated Gas or Electric Light Plants in the year 1907, aggregating in value $2,607,197.

Acton	$8,200	Mitchell	$15,000
Alexandria	13,000	Morrisburg	107,100
Almonte	38,000	Mount Forest	13,000
Amherstburg	3,500	Napanee	45,000
Aylmer	27,027	Newmarket	13,045
Barrie	74,933	Niagara	15,000
Beeton	6,200	North Toronto	9,000
Berlin	298,148	Oakville	1,883
Blenheim	12,000	Orillia	†250,000
Bothwell	6,200	Owen Sound	180,911
Bracebridge	66,714	Palmerston	14,000
Brockville	128,347	Paris	50,510
Campbellford	18,000	Parry Sound	70,246
Chippewa (gas)	1,100	Perth	13,000
Clifford (acet. gas)	2,950	Picton	30,000
Collingwood	51,859	Port Colborne	725
Deseronto	20,000	Port Perry	7,000
Dresden	9,273	Port Stanley	250
Dundalk	6,000	Prescott	18,000
East Toronto	17,845	Preston	40,108
Fort Erie	3,176	St. Marys	20,000
Goderich	39,859	Strathroy	18,099
Gore Bay	250	Streetsville	8,700
Gravenhurst	32,015	Sturgeon Falls	47,236
Hagersville	684	Sudbury	39,445
Hespeler	11,800	Thamesville	6,250
Huntsville	19,302	Thessaton	11,305
Iroquois	10,000	Thorold	25,000
Kenora	*388,712	Tilbury	1,100
Kincardine	20,217	Tottenham	6,000
Kingsville (nat. gas)	2,500	Trenton	9,000
Leamington (nat. gas)	25,000	Waterloo (gas)	20,000
Madoc	15,000	Weston	8,800
Markham	5,000	Whitby	24,638
Midland	40,000	Wingham	30,000
Milton	14,135	Woodville	600
Milverton (acetylene)	200	Wroxeter	100

* Including Telephone System $11,330, and Hydro-Electric Power plant $329,143.
† Including Power Transmission plant.

Twenty-first Annual Reports

OF THE

Inspectors of Factories

FOR THE

Province of Ontario

1908

Published by the Ontario Department of Agriculture, Toronto

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

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1909

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TORONTO.

To the Honourable JOHN MORISON GIBSON, K.C., LLD., etc., etc., etc.,
Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the pleasure to present herewith for the consideration of your Honour, the Reports of the Inspectors of Factories for 1908.

Respectfully submitted,

JAMES S. DUFF,
Minister of Agriculture.

TORONTO, 1909.

REPORTS

OF THE

INSPECTORS OF FACTORIES

FOR THE

PROVINCE OF ONTARIO

1908.

REPORT OF CHIEF INSPECTOR JAS. T. BURKE.

To the Honorable the Minister of Agriculture:

Sir,—I have the honor to submit to you the twenty-first annual report of the Factories' Inspectors for the Province of Ontario. In doing so, it affords me pleasure to be able to say that the work of the year and the results accomplished by factory inspection have been very satisfactory. Although the manufacturers to some extent felt the depression, yet we found that more applications for overtime permits had been received from certain factories than during the previous year, and the greatest difficulty experienced by factory owners was not a scarcity of orders but instead a scarcity of money. This, to some extent, was blamed on our monetary system. However, we are assured that depression was only of a temporary character, and we now can expect a very rapid revival of trade conditions. Of course, where speculative investments are withdrawn to any great extent the result is a scarcity of money, which has a very marked effect on development and enterprise. We are now assured that the trade outlook is most promising, and this will be appreciated by many unemployed who are anxiously awaiting work.

Inspectors' Districts.

We have nine Inspectors, whose districts are as follows:—

H. A. Clark, (residence London): Mr. Clark's territory is to be included west and south within the following lines: Port Stanley to London, to Lucan Crossing to Sarnia, to Point Edward to Windsor.

A. W. Holmes, (residence Toronto): All of Toronto excepting that portion assigned to Mr. Tutt. West of Parliament Street, Howard Street and Glen Road; north to city limits; south to water-front; west excepting that portion assigned to Mr. Hungerford.

R. Hungerford, (residence Toronto): North: Including terminal T.N. O. Ry., North Bay, Verner, Sudbury, Parry Sound, Scotia Junction, Orillia, Haliburton, Coboconk and Coe Hill, and south of Canada Atlantic Ry.; east, Kingston and Pembroke Ry. not including Harrowsmith nor Renfrew. East: Main line C.P.R., not including Smith's Falls, nor Arnprior. South: C.P.R. main line east not including Marlbank, Belleville, Port Hope, Port Perry and Scarboro Junction. West: West Toronto, Swansea and New Toronto. G.T.R. main line west not including Hamilton, but includes St. Ann, Georgetown, Owen Sound, Beeton, Meaford, Penetang, and Midland.

Thomas Keilty, (residence Ottawa): Ottawa, C.P.R. main line north to North Bay (exclusive). Canada Atlantic Ry. west to Scotia Junction (exclusive). West to Renfrew, Eganville, Arnprior, Carleton Junction, Westport and Brockville; south to River St. Lawrence; east to Quebec boundary.

Fred. Kellond (residence Hamilton): G.T.R. Hamilton, main line west to London (exclusive). East to Niagara Falls (inclusive). All south and east of London to Port Stanley line.

S. J. Mallion, (residence Stratford): West to Pottersburg (exclusive), to Lucan Crossing. L.H.B. Ry and B. & G. Ry. to Goderich and Kincardine. North including Southampton and Bruce Peninsula. East not including stations on C.P.R. Ry. and G.T.R. Ry. between Owen Sound, Georgetown and Hamilton but excludes Shallow Lake. Southern boundary shall not include stations on G.T.R. southern division main line between Hamilton, Harisburg, St. George, Paris, Woodstock and London.

H. J. Tutt, (residence East Toronto): Toronto, east of and including both sides of Parliament Street. Howard Street, Glen Road and waterfront. East G.T.R. main line to Brockville (not inclusive). North from Whitby to Port Perry (inclusive). North from Cobourg to Harwood (inclusive). Trenton north to Frankfort, Napanee, Kingston and north to Marlbank and Harrowsmith. South including Lake Ontario and Prince Edward County.

Miss M. Carlyle, (residence Toronto): City of Toronto, including west side of Yonge Street, north to city limits. West to Goderich and Windsor and all places south between Goderich, Stratford, Berlin, Mosborough and G.T.R. main line east, exclusive of Guelph, and stations between there and West Toronto, including Niagara Peninsula, and all places south to Lake Erie.

Mrs. J. R. Brown, (residence Toronto): City of Toronto, east side of Yonge Street, to Province of Quebec boundary line. North including Ottawa, Mattawa, North Bay, Sudbury, Owen Sound, Wiarton, Southampton, Teeswater and Kincardine. South exclusive of Clinton, Seaforth, Stratford, Berlin, but includes stations between Guelph and West Toronto.

Factories Inspected under Schedule A.

The following factories as well as workshops have been inspected under Schedule A.:

Agricultural Implement Factories.
Apple Evaporator Factories.
Artificial Flower Factories.
Auger Factories.
Axle and Spring Factories.
Bakehouses and Bakeshops.
Baking Powder and Yeast Factories.
Barb Wire Factories.
Barrel Factories.
Basket Factories.
Bell Factories.
Billiard Table Factories.
Bindertwine Factories.
Bird Cage Factories.

FACTORIES INSPECTED UNDER SCHEDULE A.—*Continued.*

Biscuit Factories.
Blacking Factories.
Blanket Factories.
Boat and Canoe Factories.
Boiler Factories.
Bolt and Nut Factories.
Book-binding Factories.
Boot and Shoe Factories.
Box Factories.
Brass Foundries.
Breweries.
Brick Yards.
Broom Factories.
Brush Factories.
Buffalo Robe Factories.
Bustle and Hoopskirt Factories.
Button Factories.
Canning Factories.
Cap Factories.
Carpet Factories.
Carriage Factories.
Carriage Goods (iron) Factories.
Carriage Woodwork Factories.
Cartridge Factories.
Car Shops.
Cement Works.
Cereal Food Factories.
Chain Works.
Chamois Factories.
Cheese Box Factories.
Chemical Works.
Chewing Gum Factories.
Chicle Works.
Child's Carriage Factories.
Cider Factories.
Cigar Factories.
Cigar Box Factories.
Clay Pipe Factories.
Clock Factories.
Clothing Factories.
Coal Hoisting Plants.
Coffin Factories.
Condensing Cream and Milk Factories.
Confectionery Factories
Coopers' Workshops.
Cork Factories.
Corset Factories.
Corset and Hoopskirt Steel Factories.
Cotton Factories.
Cutlery Factories.
Distilleries.
Domestic Utensils Factories.
Dress Shield Factories.
Drop Forging Factories.
Dye Works.
Edge Tool Factories.
Electric Machinery Factories.
Electrotype Foundries.
Elevator Factories.
Emery Wheel Factories.
Enamelling Works.
Envelope Factories.
Extracts and Essential Oil Factories.
Excelsior Factories.
Featherdown Factories.
Felt Factories.
File Works.
Fire Works Factories.
Flax Mills.
Flour Mills.
Foundries.
Fringe and Tassel Factories.
Fruit Desiccating Factories.
Furniture Factories.
Furriers' Workshops.
Galvanized and Pressed Ironwork Factories.
Gas and Electric Light Works.
Glass Works.
Glove Factories.
Glucose Factories.
Gun and Small Arm Factories.
Hair Factories.
Hair Cloth Factories.
Hames Factories.
Hammer Factories.
Hat Factories.
Hinge Factories.
Horn Comb Factories.
Hobby Horse Factories.
Hosiery Factories.
Iron Bridge Works.
Jams, Jellies and Pickle Works.
Jewellery Factories.
Kaoka Factories.
Knitting Factories.
Knitting Machine Factories.
Knitting Needle Factories.
Lace Factories.
Lamp Goods Factories.
Last Factories.
Laundries.
Laundry, Bluing and Washing Crystal Factories.
Lead Pipe and Shot Factories.
Leather Goods Factories.
Linen, Cotton, and Jute Bag Factories.
Lithographers' Workshops.
Lock Factories.
Locomotive Works.
Machine Shops.
Machine Screw Works.
Mantle Piece Factories.
Marble Works.
Match Factories.
Matting Factories.
Mattress Factories.
Meat-packing Houses.
Metallic Shingle Factories.
Mica Works.
Mill Furnishing Factories.
Millinery Workshops.
Mirror Factories.
Moccasin Factories.
Nail Works.
Necktie Works.
Oil Mills.
Oil Refineries.
Oilcloth Factories.
Organ Factories.
Organ Reeds Factories.
Ornamental Moulding Factories.

FACTORIES INSPECTED UNDER SCHEDULE A.—*Concluded.*

Overgaiter Factories.
Paint Works.
Paper Bag Factories.
Paper Box Factories.
Paper Collar Factories.
Paper and Pulp Mills.
Paraffine Factories.
Patent Medicine Factories.
Photographic Supplies Factories.
Piano Factories.
Piano and Organ Keyboard Factories.
Picture Frame Works.
Pin Factories.
Planing Mills.
Plated Metal Works.
Polish Factories.
Plush Factories.
Potteries.
Printing Ink Factories.
Printing Offices.
Pulp Factories.
Pump Factories.
Pumping Stations.
Quilting Factories.
Rag-sorting Workshops.
Rattan Goods Factories.
Reaper Knife Factories.
Regalia Factories.
Repair Shops.
Rivet Works.
Rolling Mills.
Rope Works.
Rubber Factories.
Saddlery Hardware Factories.
Safe Works.
Salt Drying Works.
Sash and Door Factories.
Saw Factories.
Saw Mills.
Scale Works.
Seed-sorting Works.
Sewer Pipe Factories.
Sewing Machine Works
Shirt Factories.
Shoddy Factories.
Shovel Factories.
Show Case Factories.
Silk Ribbons Factories.
Silverware Factories.
Skate Works.
Soap Works.
Soda Water Factories.
Spice and Coffee Mills.
Spoke and Hub Factories.
Spool Factories.
Stained Glass Factories.
Starch Factories.
Stave Factories.
Stay Factories.
Steel Wire Factories.
Straw Works.
Sugar Refineries.
Suspender Factories.
Syrup Factories.
Tanneries.
Tent and Awning Factories.
Terra Cotta Works.
Thread Spooling Factories.
Tin Stamping Works.
Tobacco Factories.
Toy Factories.
Trunk Factories.
Tub and Pail Works.
Type Foundries.
Typewriter Factories.
Umbrella Works.
Varnish Works.
Velocipedes and Bicycle Factories.
Veneer Factories.
Vinegar Works.
Waggon and Sleigh Factories.
Wall Paper Factories.
Watch Case Factories.
Wax Paper Factories.
Wheel Factories.
Whip Factories.
Wholesale Packing Houses.
Window Shade Factories.
Wire Goods Factories.
Woodenware Factories.
Wood Pulley Factories.
Wood Screw Factories.
Woollen Factories.

FIELD INSPECTION REPORTS.

We herewith reproduce a copy of our field inspection report prepared in triplicate form, which is simple, and enables the Inspector to leave a copy of his recommendations, if any, with the management prior to leaving a factory or shop premises. The second copy is required to be forwarded to the office at the end of each week, whether any recommendations have been made or not. The third copy is retained in the book for a reference by the Inspector. At the end of each week reports with recommendations are transferred from those reports to cards on record system, where they are totalled each week, and subsequently we communicate with factory management reciting the recommendations of our Inspector and asking what progress has been made towards compliance with the same. Our letters together with replies are also recorded. Moreover, our letters are recorded on "fol-

low up" system. So between the personal work of our staff of Inspectors and our system of "follow up," I am pleased to report that splendid results are being obtained in safeguarding elevators, openings to elevator shafts, guarding miscellaneous forms of dangerous machinery, as well as that of improving sanitation in its many forms, and also placing factory buildings in a safe and habitable condition.

ONTARIO FACTORY INSPECTION REPORT.

No..... Date ..... 19.....
Name of establishment .....
Manager..... Supt. .....
City, Town or Place .....
Street ..... No. .....
Name of person who accompanied Inspector .....
Goods Manufactured .....
Number employed..... Males?..... Females?.....

DEAR SIR.—In accordance with the Factories Act you are hereby notified as follows:

GENERAL INSPECTION REPORT.

The following is a copy of our general inspection report, which is also in counterfoil single sheet book form, and is used where a general report of a factory is required. As will be observed, all questions relating to the Act appear opposite each section with a space left at bottom for Inspector's remarks. This makes a very thorough and convenient form to fill in, after which report is sent to the office, where it is checked, recorded, and filed.

ONTARIO FACTORY INSPECTION REPORT.

No.....Date.....19.....
Name of establishment.....
Name of Owner.....Manager.....Supt.....
City, Town or Place.....Street.....No.....
Name of person who accompanied Inspector .....
Goods manufactured .....
Number employed.....Males?.....Females?.....

Sec. 3 Is age of a child or young person determined by a birth certificate?.....
Sec. 4 No. of girls employed under 18 years of age?.....Nature of employment?.....
No. of boys employed under 16 years of age?.....Nature of employment?.....
Sec. 5 No. of employees between 12 and 14 years of age, who work in canning factories? .....Males?.....Females?.....
No. of employees working out doors in connection with canning factories under 12 years of age?.....Males?.....Females?.....
Sec. 7 Are female employees allowed to wear their hair loosely?.....
Sec. 9 Give hours of female employees? .....Day?.....Week?.....
Do females work later than 6.30 p.m.?.....
Are eating rooms provided for female employees?.....
Sec. 10 Give hours of labour in canning factories?.....Women?.....
Girls?.....Men?.....Boys?.....
Sec. 11 Have you a permit for extra hours?.....Is permit posted?.....
Secs. 13, 34 and 35. Are notice cards affixed in factory?.....
Sec. 14 Are children allowed to clean machinery while in motion?.....
(2) Are young girls or women allowed to clean mill gearing machinery while in motion?.....
(3) Are children or young girls allowed between fixed and traversing parts of any self-acting machine while in motion?.....
Sec. 15 Are water-closets provided?.....For every 25 persons?.....
Male?.....Female?.....
Are water-closets inside or outside?.....

Have closets separate approaches for male and female?.....
(c) Is there a supply of pure drinking water available for each tenant?.....
(b) Are there any defective drains or plumbing?.....
(b) Are roofs?.....Windows?.....Floors?.....
of building?.....and water tanks?.....in good repair?
Sec. 16 Are water-closets separated?.....Sanitary?.....Good repair?.....
(a) Is factory in a clean and sanitary condition?.....
(c) Are workrooms or shops properly heated?.....
(d) Are workrooms or shops properly lighted?.....Ventilated?.....
(e) Is 300 cubic feet of room space allowed for each employee?.....
(g) Is dust generated?.....How?.....Is it Removed?.....
(h) Are drinking cups and water eight feet distant from closet?.....
Sec. 9 Does any person sleep in building or bake shop?.....
Is there a stable under the same roof?.....
Sec. 20 (a) Are belts?.....Shafting?.....Pulleys?.....Cogs?.....
Gearing?.....Set-screws?.....
Couplings?.....Saws?.....Buzz planers?.....
Wood shapers?.....Vats?.....Pans?.....in floors?.....
Other dangerous machinery?.....properly guarded?.....
Are loose pulleys provided?.....Are counter-shafts provided?.....
Are belt shifters provided?.....
Are stairways and approaches guarded?.....
(c) (d) Are elevator cars?.....Hoisting machinery?.....
Guards?.....Well-holes?.....
In conformity with the Act?
Is motive power controlled from work rooms by bells?.....
Signals?.....or Clutches?.....
(f) Where are inflammable materials stored?.....
(g) How many boilers?..... What h.p.?.....Are they insured?.....
If insured when does policy expire?.....
By whom insured?.....
Sec. 20 If not insured give date of last inspection?.....
Name and occupation of Inspector?.....
What kind of mechanical power used?.....
Steam h.p.?..... Water h.p.?.....
Motor h.p.?.....Gas or gasoline or other h.p.?.....
Are cooking retorts and vessels tested?.....
And provided with safety valves?.....
Sec. 21 What means are there for extinguishing fires?.....
Do main outside and inside doors open outwardly from factory entrance?.....
To tower stairways?.....To fire escapes?.....
Are doors bolted?.....Barred?.....
Locked?.....during working hours?.....
No. of storeys in building?.....No. employed on each floor?.....
1st, Males?.....Females?.....
2nd, Males?.....Females?.....3rd, Males.....Females?.....
4th, Males?.....Females?.....Basement, Males?.....Females?.....
Are suitable fire exit towers provided?.....
Are suitable fire-escapes?.....exits?.....Number?.....Kind?.....
Repair?.....provided.....
Are fire-escapes connected with building by iron or tinned doors or windows with iron shutters?.....
.....
Sec. 22-24 Are accidents and explosions reported?.....

Remarks:.....
.....
.....
.....
.....
.....

.....*Factory Inspector.*

Accidents.

There were 532 accidents reported during the year, of which 28 were fatal and are described as follows:

Mr. Bird, employed in The Watson Manufacturing Company, Paris, died from injuries received while ascending in elevator, was caught between platform and car.

Frank Gennex, employed in A. M. Salmon's Lumber Mill, New Liskeard, was killed by being caught on dog of carriage and drawn on saw.

Hector Pomminville, employed in the J. R. Booth Mill at Ottawa, was killed while unloading logs from railway cars in yard. Was thrown to the ground and log passed over him and he died shortly after from injuries received.

Ernest Goddard, employed by The Lake Superior Power Company, Sault Ste. Marie died from injuries received by being scalded on legs, arms and back. He accidentally stepped into an opening provided for pike-poling veneer logs.

Wilbur Read, employed by Reid Brothers & Company, London, died from result of accident on elevator.

William McMaster, employed by Siemon Brothers, Wiarton, died from result of blow near stomach by a board which was thrown from rip saw.

John Moffatt, employed by Beardmore & Company, Acton, died from injuries received from falling down hoist shaft from top flat of dry loft on to hoist at bottom of shaft.

Henri Bouchard, employed in the J. R. Booth Lumber Mill, Ottawa, while laying a plank over a pond, fell in and was drowned.

James Imrie, employed by The Toronto Electric Light Company, while waiting for the men to get some castings in position, sat on engine belt; the engineer above moved piston backwards and forwards to work water out of cylinder, and he was crushed between pulley and belt, from which he died.

Lawrence Plant, employed by Chalcraft & Company, Toronto, fell down elevator shaft and was killed.

George Andrews, employed by The Firstbrook Box Company, Toronto, while trying to adjust a belt on main shaft pulley, when it became fast on shaft, causing collapse of small connecting shaft, injuring him to such an extent that he died.

Wm. Quimby, employed by The Rainy River Lumber Company, Rainy River, was severely scalded by breaking off pipe under battery of boiler, from which he died.

S. May, employed by The Western Portland Cement Company, Atwood, while putting away a rope used for putting on belts, it came in contact with shaft; the other part was about his wrist, and he was drawn around the shaft, receiving injuries from which he died.

Louis Denault, employed by John B. Smith & Sons, Callender, while using axe to take a piece off board, it caught on pulley and handle was driven into his bowels bursting main artery causing instant death.

Joseph Belcota, employed by The Carney Lumber Company, was caught between rollers of slab slasher and so badly crushed in legs and stomach that he died.

Darby Dougherty, employed by The Lincoln Paper Mills, Merritton, was overcome by weakness and fell in a pool of water face downwards and was suffocated.

H. Baker, employed by E. Leonard & Sons, London, was killed by explosion of piston head. It is supposed that some liquid percolated through metal and when heated generated steam.

Pawlo Mamcrar, employed by The Northern Construction Company, Kashalaine, while working at slush table, got up to clear slabs away from the saws and was almost cut in two. He died while being taken to hospital.

Fred Easter, employed by The Hamilton Steel & Iron Company, was thrown over top of stack into which a block was hooked by which he was raised and lowered at the end of a rope, the hook slipped from place and he fell to bottom and was killed.

W. Hoag, employed by N. Playfair, Midland, was caught between end of log carriage and bunter, crushing leg badly from which he died.

Oliver Pointer, employed by The Ontario Malleable Iron Company, Oshawa, was killed by the bursting of an emery wheel.

Thomas J. Plummer, employed by Wickett & Craig, Toronto, fell on his head from hoist and died within two hours.

Tonas Creas, employed by The Harris Abattoir Company, was killed by falling bricks; roof of vault suddenly fell in.

Costanzo Arnedo, employed by The Electro Metal Company, Limited, Welland, was killed by electric shock.

Harry Burton, employed by The Belleville Portland Cement Company, Belleville, while oiling machinery overhead, lost his balance and fell, striking a concrete floor, causing instant death.

Edward Williams, employed by The Dominion Pressed Steel Company, Port Elgin, was struck by a pinch bar while a machine was being moved, causing death.

John Gubbins, employed by the International Harvester Company, Hamilton, had his skull fractured from being struck by annealing pot, causing death.

Albert Desarmeau, employed by J. R. Booth, Ottawa, while driving a horse and cart up a small bridge, made the horse go over side of bridge, and horse, cart and man fell about fourteen feet. He died from injuries.

As there appears to be a misunderstanding on the part of some employers of labor regarding the reporting of accidents, we herewith attach that portion of the Act relating thereto, and also "Form F" which should be used as a guide when reporting accidents, whether fatal or otherwise:

SECTIONS OF FACTORY ACT AND FORM RELATING TO THE REPORTING OF ACCIDENTS.

Notice of accident to be given to inspector.

22. In case of a fire or accident in any factory occasioning any bodily injury to any person employed therein, whereby he is prevented from working more than six days next after the fire or accident, a notice shall be sent to the inspector in writing by the employer forthwith after the expiration of the six days, and if such notice is not so sent the employer shall be liable to a fine not exceeding $30. 58 V. c. 50, s. 7.

Notice of explosion.

23. In case of an explosion occurring in a factory, whether any person is injured thereby or not, the fact of such explosion having occurred shall be reported to the inspector in writing by the employer within twenty-four hours next after the explosion takes place. And if such notice is not so sent, the employer shall be liable to a fine not exceeding $30. 58 V. c. 50, s. 8.

Notification of death or fatal injury.

24. Where in a factory any person is killed from any cause, or is injured from any cause, in a manner likely to prove fatal, written notice of the accident shall be sent to the inspector within twenty-four hours after the occurrence thereof, and if such notice is not so sent, the employer shall be liable to a fine not exceeding $30. 58 V. c. 50, s. 9.

FORM F.

(Sections 22-24 and 50.)

"THE ONTARIO FACTORIES ACT."

To.....
Factories Inspector.

You are hereby notified, pursuant to section 22 (or as the case may be) of "The Ontario Factories Act," of the happening of an accident in the factory hereunder mentioned, whereof the following are particulars:—

1. Name of person injured (or killed).
2. Factory in which accident happened.
3. Date of accident.
4. Age of person injured (or killed).
5. Residing on street in the of
6. Cause of injury (or death).
7. Extent of injury.
8. Where injured or killed person sent.
9. Remarks.

Dated this day of

(Signature of Employer or Agent).....

Moreover, it is also apparent that certain manufacturers fear that this and other information obtained by the Inspector may be used against them in the event of an injured workman applying to the courts for damages under "The Workmen's Compensation Act," or other Acts, as the inspector may be subpœnæd to give evidence as to the condition in which he found defendant's factory at the time of his inspection. We must admit that prior to the introduction of section 32 (*a*), which has been added to the Factories Act, our work was much interfered with by being required to attend court, but as you will observe under this new section, the Inspector may object to supply evidence as to any factory inspected in the course of his official duty. The section reads:

"Where an Inspector appointed under the Ontario Factories Act is called as a witness, he shall be entitled, acting herein by the direction and on behalf of the Attorney-General or of a member of the Executive Council, to object to give evidence as to any factory inspected by him in the course of his official duty."

BOILER INSPECTION.

I am pleased to state that by the persistent efforts of Inspectors, and from the fact that the districts have been reduced in area by the addition of more Inspectors, the work of boiler inspection, in common with the other duties of the Inspectors, has received careful attention.

I herewith reproduce a copy of Steam Boiler Inspection Act and also unofficial blank form of steam boiler inspection certificate, prepared by us, which is very extensively used by the engineers throughout the Province when making a report of steam boilers inspected by them, and has given splendid results:

STEAM BOILER ACT.

Section 20, subsection (*g*).—No boiler shall be used that is not insured in some boiler inspection company duly authorized in the Province for that purpose, or that has not been inspected within one year by a competent inspector, such inspector to be a man who has had charge of a boiler and engine for a period of not less than five

years, or who holds a certificate as a stationary engineer, and the manager or proprietor shall, whenever so requested by the inspector, produce for examination the insurance policy or the certificate of inspection.

UNOFFICIAL FORM WHICH MAY BE USED AS A GUIDE IN MAKING OUT BOILER INSPECTION CERTIFICATES.

I, the undersigned, certify that I have examined, and tested by hydrostatic pressure and other tests the steam boiler of

Name..... Industry .....
City .....
County.....
.....at a pressure of.....(.....)
pounds to the square inch and that the same can carry with safety a pressure not exceeding .....(.....)
Safety valve .....
Blow off valve .....
Stop valve .....
Steam gauge .....
Try cock .....
Feed apparatus .....
Apparatus under pressure .....
General care .....
.....
Name of Engineer.....Certificate 1st, 2nd, or 3rd class.....
Name of Fireman.....Certificate 1st, 2nd, or 3rd class.....
Age of boiler .....
Condition of boiler.....
When repaired .....
Water gauge .....

Remarks.....

.....

This Certificate must be returned to the office of Factory Inspectors, Parliament Buildings, Toronto, Ont.

.....Engineer.

Date of Inspection..... 19.....

CHILD LABOR.

I am sure there are none who consider the matter intelligently but will approve of the law which forbids the employment of children under fourteen years of age in our factories. I may say the law is fully enforced, and we are not aware that any child under this age is employed in this Province, notwithstanding statements imprudently made to the contrary. I may say that to a certain extent it is easier to prevent the development of child labor now than to suppress it after it has become established and many industries have learned to depend on it for their development and profit. In our judgment no child while in the age of helpless dependence should be required to perform work that prevents the proper development of mind and body. We sometimes find in our experience that some children are both physically and mentally stronger at fourteen years of age than other children are at sixteen years of age. We also find that juniors sometimes have a better education. Again, we find children are driven to work at an early age by home necessities, some parents being invalided. Other cases show a widowed mother with a young family dependent entirely upon themselves to secure an education and retain their homes. On the whole I am strongly of the opinion that our law is a good one, and is being enforced. The life is more than meat

and the body than raiment, but there should be some provision made whereby the necessity of children going to work at an early age (owing to parents being incapable or invalided) should be obviated, as it is conceded that this country desires her children to develop into healthy and strong men and women.

The following is a form of unofficial birth certificate, prepared by us, which has been found very useful in ascertaining the correct age of young persons applying for work in factories, and is largely used by employers.

Name and address of Employer.....

UNOFFICIAL FORM OF BIRTH CERTIFICATE AND ABSTRACT OF LAW RELATING THERETO FOR THE PROVINCE OF ONTARIO.

Part (5) of section 2. Child shall mean a person under the age of fourteen years.

Section 3 and 5. No child under 14 years of age shall be employed in any factory except during months of June, July, August, September and October in connection with canning or desiccating fruit. A violation of this section carries a penalty of $50, or imprisonment for three months.

Section 38. The parent or guardian allowing any child to be employed in a factory contrary to this Act shall be liable to a penalty of $50, or imprisonment for three months.

Section 37. Every person, including parents or guardians, who wilfully make or sign a false declaration under this Act, is liable to a fine of $100, or imprisonment for six months.

Place..... Date.....

This certifies that I am the parent or guardian of.....
.....and that he was born at.....
in the Province of ..... on the .....
day of .....in the year.....and is now
.....years, and.....months of age.

.....
Signature of Parent or Guardian.

Witness.....
Date.....19.....

The above named child is registered in the Town or Church records of
.....as born on the.....day of
....in the year.....

.....
Signature of Registrar or Clergyman.

Date.....19.....

Where a child is born outside of the Province of Ontario, the parent or guardian may appear before a Magistrate, Justice of the Peace or Notary Public, and make declaration that the above named and described child is the age required by law.

OVERTIME PERMITS.

I may say that, notwithstanding the depression, we have issued more overtime permits for the year 1908 than during previous year. This was not caused by a scarcity of help, but trade conditions apparently did not warrant piling up manufactured stock. Therefore, with repeat orders, the manufacturers were obliged to work their experienced help in order to meet the demand. The majority of applications for overtime were received previous to the rush of Christmas trade.

Conclusion.

I have not burdened this report with minute details or special instances. The different subjects have been thoroughly dealt with by our Inspectors. I have endeavored to briefly state our mode of organization and the enforcing of the different sections of the Act.

All of which I have the honor to submit,

Most respectfully yours,

James T. Burke,
Chief Factories Inspector.

REPORT OF INSPECTOR HENRY A. CLARK.

To the Honorable the Minister of Agriculture:

Sir,—I have the honor to submit a report of the inspection of factories and workshops in my district for the year 1908.

It would be interesting and very informing, were it possible, to relate the varied experiences of an inspector for twelve months, and the results accomplished through his efforts. But as this cannot take the form of a narrative or a comprehensive report, or include official correspondence, I must confine myself to a few remarks concerning the conditions as they exist in the principal lines of industry in the district.

Speaking generally, my duties during the past year have been attended with success, and the prospects for further progress in the future are most encouraging. The inspection, covering as it does, many sections, has been of much benefit to both employers and employees. I have met with some opposition to my demands in the enforcement of the law, but, happily, such opposition has been the exception and not the rule. The modern manufacturer is always glad to receive suggestions that will improve conditions, or secure the safety of the workmen in his employ. There is still room for further amendments to the legislation already enacted; to establish a more uniform standard and to do justice to those who are within the pale of existing laws. I have reference to certain conditions in the Factories Act, such as Fire Protection, Sanitation, Child Labor, and Boiler Inspection, all of which should be established on the same basis in the Shop's Act in regard to conditions.

Saw Mills.

During the year I visited a large proportion of the saw mills in the Province. I am pleased to say that notwithstanding the great activity in this line of industry, the law, with but few exceptions, was fairly well lived up to. I found the mill managers, as a rule, willing to make any changes that would safe-guard the workmen employed in and around the mills. In my tour of inspection through the mills in the Manitoulin Island and through the Georgian Bay district, I found the child labor problem with which the Inspector had to battle with in past visits had disappeared. It was a rare thing to find a boy under fourteen years of age working in a mill.

I find that a number of mills run day and night. I have recommended that special protection be provided for all parts of machines that are in any way dangerous, and also that the best light obtainable be introduced for night use. In all lines of industry operated on the principle of continuous employment, I have recommended that the lighting facilities be of the best kind.

Child Labor.

During the year I have found some twenty-two children employed in factories. I have made no prosecutions, but will do so with these parties should they become guilty of a second offence. I found three cases where school teachers have given certificates of leave from school to children, in each case for a period of six weeks. These children were allowed to work in factories, until I became aware of the fact, when I demanded their dismissal. There are a great many employers who are of the erroneous opinion that it is permissible to employ children under fourteen during the school vacation, and some parents are also of this opinion. I found that out of the twenty-two children mentioned, there were only two cases where the child's wages were a necessity to the parents. Municipalities should be compelled to provide for any home, where the wages of a child is the only means of support, and allow these, their future citizens, the opportunity to obtain a common school education.

In cases where I have doubt regarding the age of a child, I insist on the employer obtaining an unofficial birth certificate form, and an abstract of the law relating to child labor; the former to be filled in, signed and sworn to by the parents. This, I hope, will to some extent save the employer and Inspector unnecessary trouble.

Guarding Machinery.

This most important part of factory inspection has received my earnest attention. I find some difficulty, however, in educating both the manufacturer and workman as to the necessity of providing and using guards. It is unnecessary for me to say that woodworking machinery is the most dangerous. In evidence of this you have only to look at the long list of accidents recorded against these machines each year. Formerly one of the difficulties that confronted Inspectors was the fact that guards were not made in Canada; but through the persistent demands of the Inspectors, manufacturers have placed them on the market, and for this reason we hope to meet with less opposition in the future.

I frequently meet workmen who say that they will not use guards, because they obstruct their work. Such men are usually the first to enter suit for damages under the Workman's Compensation Act, when they meet with accidents. I have at every opportunity impressed manufacturers of machines with the importance of having them properly protected before they are offered for sale.

There is one feature that should be guarded against, and that is permitting manufacturers to place inexperienced men to work on dangerous machines. This is the cause of so many accidents.

Evaporators.

I visited a number of apple evaporating plants. Much improvement is necessary in the majority of these places. The manner in which the product is handled is not to be commended. More care should be given to the wash-rooms, and keeping the floors and outside of the plants in clean condition. This is a matter of great importance in all institutions where food is handled. The proprietors of these establishments have been notified that things in this regard must be kept to the standard, and anything but cleanliness will not be tolerated.

Canning Industries.

I have visited all the canning factories in my district. The majority of them are well kept, but a few are far from what they should be. I have recommended necessary improvements, and will notify the Department if they are not put into effect. It is unfair to the public and to this important and growing industry itself to permit carelessness to continue in these few places.

The most objectionable features were: The lack of clean water, soap, basins, and towels for the use of the employees.

In some places where there is no system of sewers, the disposal of garbage is not attended to in a proper manner, and in warm weather the atmosphere in the vicinity of the factory becomes permeated with an odor that is both offensive and unhealthful.

In a few places the steaming and cooking rooms are not separated from other parts of the buildings—the entire place becomes filled with steam, the inhalation of which is very unhealthful. Conditions in all canning factories should be such that the floors of the factory portions could be flushed out daily.

The canning industry promises to be more and more important in our Province year by year, and while the quantity of output increases, it behooves the factory Inspector to do all in his power to encourage good quality and purity in the product.

I have served notices in reference to the matters mentioned, where it was found necessary, and I hope to report improvements next year.

Overtime.

During my term as Inspector I have had some trouble in regard to long hours for females, and with firms allowing them to work without a permit from the Inspector.

The Act pertaining to overtime is as follows: "The hours for working in one day shall not be later than half-past six o'clock in the evening, unless a special permit is obtained in writing from the Factory Inspector. In the case of the Inspector permitting such exemption, no woman or young girl shall be employed before the hours of six o'clock in the morning nor after nine o'clock in the evening." A deal of trouble might be saved if the manufacturers and employees would read the abstract of the Ontario Factories Act, which is in every factory.

Elevators.

Elevators and hoists are always a source of great danger, but with those that are protected according to law the danger is minimized. The accidents from this source have been greatly reduced in number since the passing and enforcing of the law governing them. Many accidents are caused by reason of not having gates of the standard height. All bars should be removed, and gates not less than five feet six inches in height put in all openings to hoists. Accidents often happen to girls while looking over low gates; the ascending or descending car has jammed their heads—this could not happen if a five feet six inch gate were in use. Too much care cannot be given to the machinery and cables in an inspection. The managing of an elevator is very important. Precautions for the prevention of accidents are not complete unless an alert and vigilant operator is in charge.

In my opinion the Act should cover mercantile establishments, as there are many lives at stake, and as a rule the elevators are not in the best condition.

Fire Escapes.

Without doubt the fire-escape problem requires a great deal of attention. During the past year I have had thirteen fire escapes placed on factories, as well as to demand that certain openings to escapes be changed. I have actually found cases where first-class fire escapes had been provided, and there were no means of reaching them. Every building in which many or few are employed should have at least two main stairways and outlets, on opposite sides of it.

Our architects and builders might well keep the matter of fire escapes in mind when planning new buildings.

Conclusion.

I am pleased to note that business has been active with the manufacturers in Western Ontario during the year, and that indications point to a more abundant prosperity for 1909.

Ontario is, we all know, destined to become the great manufacturing Province of greater Canada. There is a great work to be done by the factory inspectors. To encourage and insist on the adoption of everything that is conducive to the safety and health of the workers; the prevention of illegal employment of the future citizens of our Province; and wherever possible to encourage that which will promote the production of superior goods for the home and foreign market; and by demanding that the letter and spirit of the laws enacted by the Ontario Legislature regarding these matters be observed.

I have endeavored to give the best service that my ability would allow, and trust that my efforts have not been in vain. It has been my policy to meet all persons in a fair and impartial manner, and to settle all difficulties in an amicable way.

I thank the Department for advice and encouragement during this my first year as factory Inspector.

The list of accidents reported is herewith appended.

I have the honor to be,

Your obedient servant,

H. A. Clark,

Inspector of Factories.

REPORT OF INSPECTOR A. W. HOLMES.

To the Honorable the Minister of Agriculture:

SIR,—I have the honor to submit a report of the inspections of factories and shops in the district assigned to me during the year just closed.

Inspector's reports dealing with very much the same conditions from year to year must necessarily have a good deal of sameness about them. Some things no doubt could be handled in a sensational manner, but nothing would be gained by that course; so it devolves on us at times to repeat many things in our annual reports.

The year just closed has been one of the lean ones for the majority of manufacturers, the employees suffering to a still greater extent by the depression of trade. The male workers are no doubt the greatest sufferers, as factories where female help are employed have been fairly busy, a large number of them working overtime during the last three months. However, everyone is looking forward to an increased prosperity during the coming year.

Since writing my last report several changes have taken place in the Department. The staff being increased by the addition of four male inspectors, a re-division of the districts, the appointment of a chief inspector, and other matters which are very beneficial to the department of Factory Inspection. My assignment is the city of Toronto from the western limits to Parliament street on the east.

During the year I have tried to visit all the places coming under my jurisdiction, but have been unable to. Some factories have been visited a dozen times during this period. With some employers it is only necessary to call their attention to any infraction of the law, while with others you have to keep pushing them along continually, as they have a different excuse every time you call.

It was my privilege, along with one of my colleagues, Mr. Clark, to visit the north and western parts of the Province on a tour of inspection, going as far as Rainy River, and taking in both north and south shores of Manitoulin Island, where a very large number of saw mills are in operation. Probably no industry in Canada felt the conditions of the money market more keenly during the last year than those engaged in the production of lumber. Very few mills were run to their full capacity, as the yards and docks were fairly well filled with the previous seasons' cut. Prices were low and the demand poor. I am pleased to report that the large majority of the mills are in excellent condition, being fitted up with the latest improved machinery, speeded up to high tension. A very few minutes after the time the log enters the mill, it is piled in the yard ready for shipment, and the amount of waste carried to the burners would provide heat for all the citizens of Toronto.

One pleasing feature of my inspection was to find very few children employed in the mills. One of the principal reasons being that there is very little work that a boy under seventeen is able to do. In the lath, picket, and shingle mills the work is very much lighter, but I found very few employed there. Those few were sent home, and the employers promised to be more careful in future as to their rightful age. The prosecutions made last year for infraction of the law may have had something to do with the conditions as I found them.

The boilers used in saw mills should be of the very best material and workmanship, as there are few places where a greater strain is placed on them. Some of the mills operate day and night gangs, and the pressure is kept up to the top notch continually. The majority of boilers used in the mills are insured, and are regularly inspected.

Any suggestions made were carefully noted, with the assurance that they would be attended to promptly. Abstract and notice cards were posted in all mills.

Laundries.

Some improvements have been made to make the conditions better for those who are employed therein, one of the largest laundries having replaced gas with electric heating, and all the mangles, both large and small, are being fitted up in that way. Thus there are no escaping gas fumes to poison the air. The temperature can be kept very much lower in the summer time, and no doubt the health of the workers will be much improved thereby.

The greatest difficulty to overcome in laundries is the accumulation of steam, especially during the cold weather. The steam coming in contact with the cold air outside drives it back. Most of these places are equipped with ventilating fans, and when kept in proper condition go a long way to minimize this trouble.

Overtime.

Considering the prevailing dulness a large number of overtime permits have been granted during the last year, more particularly to those places where ladies' wear is manufactured. One reason given is, that it is impossible to make any amount of stock ahead as the fashions change so frequently. However, there is no doubt that the average employer recognizes that there is nothing to be gained by working the employees over the regular hours, and it is only in cases of necessity that the permits are asked for; but, as mentioned in my previous report, the limit of thirty-six nights each year could be shortened to the advantage of all concerned.

Machinery.

The English law provides that all dangerous parts, such as gearing and couplings, shall be properly guarded before being offered for sale. A law of that kind would be beneficial, as the proper place to have it done is where the machine is manufactured. Exposed gears, projecting set screws, gib head keys, unfilled key ways are all sources of danger. The guards should be as necessary a part of the machine as the power that runs them. We are very often asked the question, "Why is not this protection provided by the manufacturers of such machines?" The answer comes down to the question of competition, it would cost five or ten dollars more to provide guards, and that might mean the loss of the order. One manufacturer informed me that on a contract to supply machines he asked the question," Did they require guards, which would cost five dollars extra?" The reply was. "No, we can sell them just as well without them." It means that on the first visit of the Inspector he asks that these dangerous parts be guarded, and the owner feels that he has bought the machine in an unfinished state, and is compelled to pay three times the cost of placing it on at the time of the construction of the machine. The same applies to saws, buzz planers, shapers, etc. Makers should be compelled to furnish the guards. I find the Appendix issued last year to be of great service, as it shows how simple some of the guards can

be provided, and when you are told by some that they never saw a guard for a certain purpose, or that it is impossible to guard certain things, it convinces and takes away all room for argument. However, I have done all possible to see that dangerous machinery is properly guarded.

Fire Escapes.

A large number of fire-escapes have been placed on buildings during the last year, some of them being on new buildings; but whether it being the fault of the architects, or the insistence of the fire underwriters, the fact remains, that no provisions have been made for a second outlet in case of panic or fire. Every building over one storey in height should have two outlets. The stairways are much to be preferred, as they are under cover, free from ice and snow in winter and always in a good state of repair. The city by-laws call for a certain standard to be approved by the city architect. Our law should be amended in this direction, as at present it means that the manufacturer of fire-escapes who can put in the lightest material, put in the narrowest balcony and stairway, is the one who is most likely to produce the cheapest article, and, therefore, secure the contract. Were the specifications and conditions laid plainly down, it would result in giving a far better fire-escape, besides placing them all on an equal footing in tendering for same.

Under the circumstances, I have insisted on getting as good a standard as possible. Old ones have been repaired and painted wherever deemed necessary.

Foundries.

There is no class of men engaged in factory life who deserve more thought and care than those employed in the moulding shops. The work is heavy and requires the very best in them to obtain the results expected. Very little so far has been accomplished by machinery. While the moulding machines are fairly successful on some classes of work, where a large number of one pattern are required, more especially in stove plate work, the men who operate them have to go lively, as the machines are generally speeded up to the limit. However, in the casting or pouring off process, the greatest tax is probably placed on the system. In carrying ladles of molten iron to pour the moulds, the man's clothing soon becomes wet with perspiration, inhaling the fumes and gases from the same. A man's system is then in no condition to meet zero weather. The change from extreme heat to one of cold is rather sudden. In some places provision has been made where a man can have a shower bath, change his clothes and go out refreshed, ready to mix in with the rest of humanity.

In some of the States legislation has been passed calling for toilet room containing wash basins connected with running water properly heated, good ventilation, and protection from the dust of the foundry. Those engaged in brass moulding, while the work is not as heavy as the iron moulder, have also a good deal to contend with, in the poisonous fumes that arise from molten brass. It is very often necessary to provide artificial help in the shape of exhaust fans to remove the gases. There are a few places in the Province that provide for the comfort of their employees in the way outlined. There should be more.

Child Labor.

A report would hardly be complete without some reference to this important phase of factory life. The Act was amended at the last session of the House, and now reads as follows: —

Amendments to the Ontario Factories Act, 1908.

1. Section 2 of the Factories Act is amended by inserting the following subsection: "Youth" shall mean a male of the age of fourteen and under the age of sixteen years.

2. Sections 9, 11, 12, 13, 25, 26, 30, 33, 44, and 50, and Schedule B, 1 to the said Act are amended by inserting the word "youth" or "youths" (as the case may be) after the word "child" or "children," wherever the same occur in said sections.

3. Sections 5 of the said Act is amended and reads as follow: Boys and girls between the ages of twelve and fourteen years, and when employed solely out of doors, children of twelve years of age may, notwithstanding anything contained in this Act, be employed during the months of June, July, August, September, and October in any year in such gathering in and other preparation of fruits or vegetables for canning or desiccating purposes as may be required to be done prior to the operation of cooking or other process of that nature requisite in connection with the canning or disiccating of fruits or vegetables. The place, room or apartment in which such boys or girls may be so employed, shall be separate from any other wherein the cooking or other process aforesaid, or the canning or desiccating of said fruits or vegetables is carried on. R.S.O. 1887, c. 208, s. 6 (6); 52 V. c. 43 (2-3); Edw. VII. c. 26, s. 6; 8 Edw. VII., c. 57, s. 3, part.

(*a*) The hours of working for children between 12 and 14 years of age in canning factories under this section are limited to the time between seven o'clock in the morning and six-thirty o'clock in the evening, or such other period of the day as may be granted by the Factory Inspector; provided, however, that the time worked in any one day shall not exceed ten hours. 8 Edw. VII. c. 57, s. 3, part.

I have found very few employed under the legal age during the last year. This may be accounted for to some extent by the existing depression, whereby an employer has more choice to pick from, and can secure a boy at seventeen as cheap as a boy at thirteen. The Act should be amended, making it compulsory to furnish a certificate of age before starting work. The Department has written several times to Great Britain to secure evidence of date of birth, and while the cost is not very heavy the time taken is considerable, and it should not be up to the Department to prove. The onus of proof should be on the employer, and if each child was compelled to provide its school certificate, giving age, date, and place of birth, it would go a long way toward simplifying matters, as during school attendance they have no temptation to give anything but the rightful age. I have had, as usual, the philanthrophic employer to meet, who assures the Inspector that the only reason for employing the child was to keep the family from starvation, and then he pays a liberal salary of $1.50 per week, so that the family can live in affluence. The special committee on child labor has reported on all these matters, and no doubt some further legislation will be forthcoming as a result of the recommendations of that body.

Complaints.

About the usual number of complaints have been received, dealing with many features, some of them being foreign to the scope of the Factories Act. However, I am always pleased to remedy any of them where it is possible to do so. I fully realize that it is impossible to recognize everything that requires attention in my tour of inspection. I have found some of the complaints on investigation far from the facts, and based simply on hearsay

evidence. They will all receive prompt attention, but whenever possible we like to have the name attached, as matters of that kind are treated confidentially.

The ready-made clothing industry has had considerable attention from me this past year. There are a large number of shops in this city. The majority of them are in fairly good condition, especially those places where they do not sublet their contracts.

It would be hard to improve on some of them, having lots of air space, with good natural light, and proper heating, and no child labor. On the other hand, is the sub-contractor, who is in one place this month, and when next you call has removed somewhere else. These are the places that require continual inspection to keep up to the requirements of the law, more especially that relating to sanitary conditions.

The competition in this class of work is very keen, and is gradually drifting into the hands of the Jewish people, who seem to have a natural aptitude for this class of work. The recognized hours of work are forty-nine per week.

Hoists and Elevators.

Elevators are responsible for quite a large percentage of the accidents that occur each year. They would no doubt be greatly reduced if it were possible to have one person operate them, and have full charge of same. On account of some hoists being used very seldom this rule would be at all times hard to enforce.

The present law relating to elevators is a fairly good one, but I go into a number of places and find nails or cleats driven in to hold the gate up to save the operator the trouble of lifting them. The trap doors are nailed or fastened back, making automatic doors and gates simply useless. The gates are like every other piece of machinery; they need some attention given them or there will be continuous trouble. I have at all times insisted that they be kept in proper working condition.

Convention.

The twenty-second annual convention of the International Association of Factory Inspectors, was held in Toronto in June. While not so large in numbers as some of the previous ones, in the amount of business transacted, the number and quality of the papers read, it would compare favorably with any previously held. The bringing together from all parts of the United States and Canada of heads of departments and Inspectors and interchange of thought and opinion must result in great good to every one interested in this work.

A list of the accidents reported during the years is appended herewith.

All of which I have the honor to submit.

Yours respectfully,

A. W. Holmes,
Inspector of Factories.

REPORT OF INSPECTOR R. HUNGERFORD.

To the Honorable the Minister of Agriculture:

SIR,—I have the honor to submit my first annual report of the inspection of factories, situated in the district assigned to me, comprising the central portion of the Province.

Unlike some of my colleagues, I am unable to speak of the present industrial conditions as compared with that of previous years, this being my first year in the position. I will endeavor to point out some of the numerous phases of commercial, industrial, and scientific advancement as they have appeared to me.

The Province being divided into seven districts, each containing factories and mills of similar character, and each inspector being desirous of reporting the whole situation as they find it, there will, I fear, be somewhat tiresome sameness in our reports. There is a possiblity, however, of the reports in some particular respects conflicting, owing to the fact that different conditions may exist in different parts of the Province. These are facts I sincerely hope will be fairly taken into account by those citizens who peruse our reports for the purpose of noting the development of science and industrial progress, and the social and moral improvement of the Province.

The past year has been one of extreme watchfulness on the part of the man with the money, not so much because of any real commercial depression in Canada, but apparently owing to the money stringency and dulness of trade in the United States and other parts of the world. The watchfulness on the part of the manufacturer, as well as the retail dealer, and a little nervousness on the part of the man with the money, to some extent retarded the industrial progress of the Province, particularly in the earlier part of the year. I am frequently asked by manufacturers as to trade conditions, in consequence of which I have become a close observer in that regard, and am pleased to say that towards the close of the year I found trade vastly improved. The manufacturer and general business man seem to have awakened to the fact that the alleged hard times was a false alarm. Confidence is being rapidly restored, many factories are being erected, and the future progress of our Province is once more assured.

Speaking generally, and in fairness to the manufacturers with whom I have come in contact, I wish to say that my duties have been made pleasurable, and in some cases my work has been greatly facilitated, by the efforts of the factory owners to assist me, and their cheerful compliance with my recommendations. My visits have apparently been welcomed, and my receptions cordial and courteous. There are some exceptions, but that, of course, is to be expected; and as I had no expectation of my path being entirely strewn with roses when I entered upon the duties as Factory Inspector, there has been no disappointment in that respect. While there is much room for improvement, I am pleased to report I have found a strong desire on the part of the up-to-date manufacturer to conduct his factory in compliance with the law.

During my short experience as Factory Inspector I have been taught to realize the great necessity of a frequency of visits to the various factories throughout the Province. The value of the factory laws depend almost entirely upon the Inspectors. Any law is absolutely useless unless properly enforced, and I recognize the fact that in many cases the factory laws will only be enforced by the frequent visits of the Inspector.

It should be the aim of every Inspector to become thoroughly competent to instruct factory owners upon the requirements of safe-guarding dangerous machinery and generally conforming with the factory laws. In my opinion many persons managing and maintaining factories, though with strong desire to observe the law and protect their employees, often forget and overlook some detail that sometimes results in serious accidents because of their minds being otherwise occupied. We also find that because of dangerous conditions existing for a certain time without an accident, the employer becomes unmindful of the existing danger. It is in these cases that the great benefits of factory inspection is manifested. The Inspector has the exceptional advantage of seeing many factories and their different devices for preventing accidents. All accidents happening within his district are brought to his notice and their causes explained. He is therefore, in a position to point out the parts of machinery in factories generally known to be dangerous.

Child Labor.

There is, I suppose, no subject upon which I could report that would be more deserving or more necessary than the subject of child labor. The vital importance of this question to the Province and to the nation has previously caused much comment. So much has been written and said upon the subject, that it is extremely difficult for me to point out any new phases of the question.

The special committee appointed by the Legislative Assembly in 1907, to bring in a report upon child labor conditions existing in this and other countries, went so thoroughly into the matter and presented its report in such a practical manner as to point out many of the conditions complained of from time to time and the proposed remedies. It would be presumptuous of me to comment upon the splendid work of that committee, and I will merely say, in passing, that in so far as my personal knowledge of the child labor question is concerned, the report was most complete and correct.

In reporting upon this very important subject I wish to state in fairness to the manufacturers throughout my district, that I have found much less child labor than I expected to find, and much less than reports would indicate. Nevertheless, I have found too much, and have put forward every effort to stamp it out. I think I can safely say that very few, if any, children under the age of fourteen years are at the present time working in the district assigned to me, and I can assure you there is not one that I know of.

In enforcing the child labor laws I have very many times felt the great necessity of some form of standard age certificate, that when properly filled out and certified to would establish beyond a reasonable doubt the age of a child seeking employment. Very often, when questioning the age of a child of whom I am doubtful, I am confronted with a certificate signed by the parents of the child to the effect that they are fourteen or over. In some cases I have refused to accept such certificates, and upon being asked to fill out one of our unofficial forms and swear to it before a magistrate the parents would refuse to do so, and allow the child to be discharged, thus proving the worthlessness of a certificate signed only by the parents.

In discussing the question of child labor, and the remedies, it would, I suppose, be wise to consider the causes. In investigating the reasons why children are sent to work at a tender age, we find them varying in many respects. We find the man and the woman who are in such poor circumstances, apparently blessed with nothing but an over-supply of children whom they are unable to support or educate. They are anxious to send the children

to work, as soon as they have sufficient strength, and often long before it. Then we find the child who prefers working to going to school, and there is no truancy officer in the locality to enforce the truancy laws. We also find that class of parents who, though able to support their family and send them to school, would compel them to go to work in the factory for the sake of the mere pittance they may bring in on pay day. We also find the employer who sees a chance to increase his profits by putting a boy in a man's place when possible. Then comes to my mind the only justifiable cause of child labor (if there is such a thing), the widow who is left penniless with a family of small children she is totally unable to support. She has a thirteen year old boy who is healthy and strong and willing to help her, she finds employment for him with some charitable employer, and I want to say it is a most unpleasant task for us to be compelled to have him discharged under these circumstances. In the case of the latter it would be well if there could be some provision made for the support and education of such children.

Another phase of the question which occurs to me as being most important, is the making of provision for the child's physical condition, and the taking into consideration the nature of the employment at which the child is engaged. I have often thought one child would be better off at some employment at ten years of age than others at the age of sixteen. That is to say, there are some employments where dangerous machinery is used, the work is laborious and unhealthy, while there are other employments where no machinery is used, the work is not laborious or unhealthy. Regarding the providing for the physical condition, I might say, it is a well known fact that many boys are stronger at fourteen years than others are at seventeen years; and, also, there are employments at which a physically weak child might be engaged that would mean certain death within a very short time. In discussing this phase of the question we are often asked, "Who is to be the judge as to the physical condition of the child?" and "Who is to be the judge as to the dangerous occupations or the unhealthy conditions?"

The Factories Act permits the Lieutenant-Governor in Council to specify occupations dangerous to children. It is very doubtful, however, if this authority has or ever will be exercised.

Statistics of the industrial institutions of this and all other countries show that boys or children are doubly liable to accidents to that of adults in the operation of machinery. In the case of high speeded wood working machinery such as buzz planers, small saws, and shapers, in the use of which the maiming of the most careful adults is very frequent. And, indeed, I may say that among men of any considerable experience in the use of these machines there are very few who cannot show unpleasant indications of the great dangers surrounding their operation. One man disputed the great danger of a buzz planer while discussing the subject with me, forgetting that he himself had lost three fingers in the operation of one a few years previous. The factories where such machines are used, I should say, are places from which children should be excluded.

The introduction of piece-work system into factories among either children or adults, and more particularly children, is a matter of much importance and should not be over-looked in considering the factory laws. Piece work with prices based upon justice, I should say would, or rather should be a fair proposition. The principle involved being that each employee be paid according to the work performed.. Thus the employer places each employee upon his or her own merits, and pays them accordingly, or on the principle that, if it is worth one dollar to make a pair of shoes, it

is worth one hundred dollars to make one hundred pairs of shoes. The system looks fair to the inexperienced person, and no doubt would be fair if the principle of paying the employee according to the value of the work performed were carried out; but like many another good thing, the principle becomes entirely forgotten, and the system is worked out very much to the detriment of the worker. I do not wish to be understood as placing the responsibility of the abuses of the piece work system entirely at the door of the employer, for in many cases the employee is equally as much to blame. The causes of these abuses are the great desire on the part of the employee to make more reasonable wages, and a similar desire on the part of the employer to make more than fair profits, or to undersell his fellow manufacturer. The employer endeavors to base the prices on the length of time taken by the fastest hand in the shop, and the higher the standard of speed attained by the employee in his or her effort to make high wages, the more the prices are reduced, and the harder each employee is compelled to work to live, until their energies are stimulated to such a high pitch that the rapidity with which they work becomes pitiful and painful to look at. Thus it will be seen that the system becomes so competitive that the principle of paying the employees according to the work performed by them is entirely forgotten, and is replaced by a principle of paying them according to the work performed by some one else, and the prices are arranged according to the lowest possible wages for which the fastest hand in the shop can be induced to work.

The awful strain upon the nervous system of the employees working under these conditions is plainly visible upon their pale and haggard faces, and as the piece-work system is daily becoming more generally adopted in the factories, the health and development of the children compelled to work under such conditions should be safeguarded either by the lessening of the hours of labor or by raising the age limit in such institutions.

The law permits a child being put to work at the age of fourteen. It does not follow, however, that all children of that age should be put to work. I believe, fourteen being the minimum age should be taken advantage of only in cases of absolute necessity and should be discouraged as much as possible by the Inspectors and the employing classes. I would not be justified in maintaining that all work is injurious to the child of fourteen years of age. It would be equally as idle for me to claim that it is not occasionally necessary to find employment for children of that age, owing to the fact that in some cases a child may be entirely dependent upon itself for a living, or by accident or misfortune the home has been rendered dependent upon the children, which makes it imperative that the child be put to work as soon as the stipulated age is reached. This is particularly applicable to immigrants who have arrived in this country in almost destitute circumstances and do not readily secure employment or fall in with the ways of the country. I wish to say, however, that I have found a decided indifference among certain classes of immigrants as to the education of their children as well as a pronounced desire to send them to the factory whether necessary or not. I call attention to these facts to show that while I am of the opinion that the working of children in factories at fourteen years should be discouraged as much as possible, I am quite mindful of the fact that in some few cases it is necessary.

It should be the desire of every good citizen of the country to see the wages among the working classes kept at a sufficiently high standard to enable the heads of families to maintain and educate their families to at least a moderate degree. Believing such to be the case, I would call attention to the fact that many people who should know, and who have given the

subject a great deal of thought and consideration, are of the opinion that there is nothing that will tend more to lower the standard of wages than the introduction of child labor. It is a well known fact that child labor means cheap labor, the child becoming a competitor against the parent, and thus instead of increasing the income of the family will eventually reduce it.

In my endeavor to enforce the child labor law the fact has been brought vividly to my mind that if The Truancy Act was properly or generally enforced the work of the Factory Inspector would be greatly facilitated. If the Act was generally observed, there would be found few, if any, children in industrial positions, and the illiteracy which now to some extent exists would, in my opinion, be entirely eliminated, particularly among the Canadian born children.

The enforcement of the truancy laws, and the appointmen of truancy officers, resting with the municipal authorities, are in many cases entirely neglected, owing to their unwillingness or their inability to pay officers for doing the work. In some localities the duties are entrusted to the man who already rings the town bell, keeps the town pound, attends to the street lighting, turns off and on the water, act as chief and county constable, and has several other duties far too numerous to mention, without any addition to his already small salary; and in consequence is given little or no attention. In some municipalities, where there has been any attempt made to enforce the truancy law, it seems to have been the rule to deal only with the children marked as absentees from school, and not with those who have never attended school in the municipality. In the matter of preventing child labor, I would like to point out that the truancy officer who would discharge his duty properly would be much more useful in that regard than the Factory Inspector, inasmuch as the Factory Inspector's authority only extends to keeping the child out of the factory, and when we chase a child out of one factory, they often turn up in another; while the truancy officer is authorized to insist on the child attending school, and if at school we know they are not in any factory. The truancy officer who discharges his duties well, not only does a great deal to prevent child labor, but tends to, at least, lay the foundation for an education which is so much required by every desirable citizen of this country. It is by no means a hard task to point out the strength or weakness of a law that has been tried; the more difficult problem is to suggest a remedy. It is nevertheless true that we cannot expect the remedy until the defects have been made known.

Boiler Inspection.

In the prevention of serious acidents I know of no branch of factory inspection requiring more attention or more persistent watching than the enforcement of the laws relating to boiler inspection.

The care, management, and inspection of steam boilers is of vital importance, not only to the factory owner and the people in his employ, but to those who reside or are employed in the immediate vicinity. Accidents occurring from unguarded machinery, while often of a very serious nature, are not of the magnitude of accidents occurring through boiler explosions. Accidents from unguarded machinery generally involve but one person, while a boiler explosion involves to some extent all the employees and the other occupants of the factory, as well as the occupants of adjoining buildings.

I find in the modern and up-to-date factories the boilers are generally insured and regularly inspected, as well as being in charge of a competent engineer and are comparatively safe. My experience, however, has not been so satisfactory among the smaller factories and mills, of which class there are so many in the northern part of the Province. In many of the smaller places the care and management of the engine and boiler is looked upon with marked indifference, and the chief qualifications required by the man in charge are to be a competent hand to shovel coal or shavings or to do a little carpenter work around the mill in his spare moments. In many cases the water gauge glass is so dirty and corroded as to render the location of the water in the boiler purely guesswork, and the man in charge has no recollection of the safety valve ever blowing off. The steam gauge has never to his knowledge been tested, and he has no assurance of how much pressure the boiler is carrying.

It is most important that all boilers should be kept perfectly clean: water gauges and their connections should be kept clean inside and outside. Try cocks should be clean and tight at all times. The safety valves, where possible, should be tried every day by hand, as well as by steam pressure. These are the measures generally adopted in well regulated places; but in many of the smaller factories and mills, where they are most required, such precautions are seldom thought of.

A steam boiler can be made reasonably safe in its operation. It, however, requires care, good management and frequent inspection to keep it that way. I have many times felt that the Inspector, and those who make the law, are to some extent responsible for the many boiler explosions, which are said to be about one per day on this continent. I have endeavored with considerable difficulty to enforce the law relating to boiler inspection, for though there has not to my knowledge been an explosion within the district assigned to me within the past year, yet I, knowing the conditions as I do, feel more or less anxious, and many times wonder why there are not more. Where I have found boilers not insured or inspected regularly, I have all along insisted upon the certificate being issued by a competent engineer as required by law. I would say regarding those certificates that by persistent work we have generally been successful in procuring the certificate of inspection. The competency of the engineer, or the reliability of his inspection, however, has not always been satisfactorily established.

In my opinion one inspection per year is not sufficient to render a steam boiler even reasonable safe. A boiler might be in a perfect condition, and with improper care and inattention on the part of those operating it become absolutely dangerous within a very short time. While the inspection certainly minimizes the danger of accidents to boilers, it is a well known fact what is required to insure reasonable safety is constant care and attention by competent men in charge. This being the case it would be natural to expect that the Stationary Engineers Law coming into effect in January of 1909, will greatly tend to eliminate the dangers of incompetent engineers in plants of fifty h.p. and over. It will not, however, apply to the smaller plants, where the conditions will remain unchanged.

As all engineers in charge of plants of fifty h.p. or over will, according to the law of the Province, be competent engineers, holding certificates, it might be advisable to alter the law relating to boiler inspection, in order to prevent an engineer from issuing a certificate for the plant of which he has charge, as certain influences might be brought to bear that would to some extent militate against the proper fulfilment of the law.

Accidents in Factories.

Among the many important features of Factory Inspection, and one requiring the very strict and close attention of the Inspector, is the prevention of accidents and the guarding of machinery so far as practicable, in order that these unfortunate and too numerous occurences may as far as possible be minimized. The very keen competition among the manufacturers, and their great desire to keep abreast with the wonderful industrial advancement of the country, seems to be carried on very largely at the expense of a continual destruction of human life, and the maiming and injuring of the men, women, and children employed in the various branches of industrial institutions. Few people, I suppose, have given this matter sufficient attention to realize its importance, but when I call attention to the fact that during last year between thirty thousand and thirty-five thousand men were killed, and two million more injured, while engaged at their daily labor in the United States, they will I think agree with me when I say too much attention cannot be given to the guarding of dangerous machinery and the general prevention of accidents.

The extraordinary growth of the commercial industries of the Province within the past few years has necessitated the introduction of more modern and rapidly producing machinery, which I believe has correspondingly increased the dangers of those employed in their operation. Manufacturers have in many cases, with a view of reducing the cost of operating their plants, adopted the employment of foreigners who are unable to speak or understand the English language. These foreigners are in many cases required to operate dangerous machines without experience, and being unable to properly understand the instructions given them are subject to increased danger, and I believe have done much to augument the list of accidents throughout the Province. This class of immigrants are generally found in quarries, foundries, tanneries, blast-furnaces and smelters where serious accidents frequently happen. The employment of unintelligent foreigners is daily becoming more common among the manufacturers, and unless the practice is checked in some way it is only natural to expect that an enormous annual list of industrial accidents will be the result.

Among the many other causes of accidents in factories are negligence on the part of some factory owner to provide proper guards for dangerous machinery, such as:—covering of open gearings, boxing of dangerous belts, providing railings on stairways and open hatch-ways, the guarding of dangerous fly wheels and engine cranks, the use of projecting set screws, the exposure of shafting with which the employees of a factory can come in contact, the exposure of saws, planers and shapers, carelessness on the part of the employer, improperly covered hot water vats, and many others that space will not permit me to enumerate.

In recommending such precautionary measures as I deem advisable for the prevention of accidents, I sometimes become involved in an argument with the factory owner as to the necessity or practicability of my recommendations. In asking that a guard be provided for a crank or fly wheel of an engine, the factory owner sometimes turns to me with a smile and says, "Sure there is no person comes in here but the engineer." Just as if the engineer was of no consequence, and it was a matter of indifference whether he was killed or not. I have many times pointed out the dangers of certain parts of the machinery, and while the factory owner would acknowledge the danger he would say, "There is only the oiler goes in there." I have also been confronted with the query, when asking that a place be fenced to prevent persons coming in contact with dangerous machinery, "What fool,

do you suppose, would try to get in there?" In reference to the latter question I might say, an accident happened in a saw mill within my district last summer in one of those places that any person would be expected to have sense enough to keep out of. Notwithstanding this, the saw on which the man was cut was well guarded. The accident led up to a suit to recover damages in which the jury contended that it should have been made impossible for the man to get into such a place, and awarded the plaintiff who was only slightly injured, a thousand dollars. It is not an unusual occurrence for me, after persuading the employer to provide guards for the dangerous machines at some expense, to find them hung on the wall, or thrown under the machine, having been removed by the operator, owing to their being slightly inconvenient. I am of the opinion that the inspector, as well as the employer, should insist upon the use of these guards whether the operator likes it or not. It is often necessary to guard careless persons against themselves.

I have endeavored to be fair and reasonable in making recommendations for the prevention of accidents, and have kept well in mind the necessity of discharging my duties with all possible justice to every person concerned. While I may say I have been generally successful in having my suggestions adopted, and I believe they have accomplished much good, yet I have found among the employers, as well as the employees, some who have a decided desire to leave the stable door open until the horse has been stolen. This indifference usually exists where no serious accidents have happened. Where accidents have occurred, however, I find circumstances entirely different, particularly where followed by costly law suits. In the case of the latter the Inspector is always welcome, and his recommendations are adopted with thanks.

Saw Mills.

Though I have seldom seen a report upon a subject of the saw mill, I have during my short experience as an Inspector arrived at the conclusion that it should be rated among the important industrial institutions of the Province—important because of the vast wealth involved, and the great number of citizens employed during the winter months in the lumber woods and in the mills during the summer.

It may be not generally known to those having no interest in the lumber or saw mill industry, that we have many thriving little towns in the northern part of the Province the male population of which are almost exclusively employed in saw mills, some mills employing in the neighborhood of three hundred men.

From the Inspector's standpoint the saw mill is of a very different character from that of other mills or factories. It is seldom, if ever, necessary to enquire very closely into the sanitary condition of a saw mill owing to the fact of them being almost without exception situated on the shore of a healthy lake or river in a sparsely populated part of the northern country.

Ventilation is another feature of the saw mill, which seldom requires the strict observation of the Inspector, as in a very large percentage of the mills the employee is as well supplied with fresh air as if he were out in the middle of the lake.

There is also the temporary character of the mill to be considered, being usually built where timber can be conveniently procured. When the timber in the locality becomes exhausted it becomes necessary in many cases to remove the mill back to the forest where timber is more plentiful.

In consequence of this, the great majority of saw mills are of but a temporary character, and are not built with any view of permanency, as most other factories are.

There is no mill or factory to my knowledge requiring more attention by the Inspector than the saw mill, owing to the frequency of accidents and the great dangers in their operation. I feel perfectly safe in saying there are more accidents in saw mills than in any other factories or mills employing the same number of men. I may say that out of three fatal accidents reported in the district assigned to me within the past year all occurred in saw mills. Whether through indifference or ignorance of the law it seems to be extremely difficult for us to get the mill owners to report accidents happening in their mills. In consequence it is not an easy task for us to form even a reasonable idea or publish an accurate report of accidents happening in mills of this character.

I have experienced some little trouble in saw mills owing to the employment of boys under fourteen years of age; or, rather in the lath mill, which is a part of every mill of any considerable size. The cutting of lath is generally given over to one man by contract, who in his desire to make all the money possible, hires boys at a low rate of wages to perform some branches of the work at which it is said they soon become quite expert and in fact just as useful as men. I have also found boys under the required age engaged in packing shingles, another adjunct to the lath mill.

One of the most dangerous machines used in the saw mill is the gang edger, which fortunately is not in general use owing to the extreme danger in its operation. They are, however, in use in some few mills, and should not be used without a guard. The great danger in the use of the gang edger is in the lumber jamming and catching on the top of the saws, and being thrown back with great violence, thus greatly endangering the lives of those operating it. A guard has been invented by a Peterboro man, which I have seen work, and I think it is a capital safeguard. This guard makes it impossible for the lumber to fly back even though the saw catches it.

Considering the tendency to work boys in mills, and realizing the necessity of guarding so much dangerous machinery, I would deem it advisable for the Inspector to make his visits to saw mills as frequent as possible.

Fire Escapes.

The primary object of Factory Inspection is to protect as far as possible the health and lives of the people employed in factories. One great feature in the inspection system, and one in which considerable advancement and good seems to have been accomplished, is the providing of adequate means of escape in case of fire.

The rapid development of our industrial institutions has resulted in the erection of much higher and larger buildings, and the employment of a much larger number of people, and in consequence has greatly enhanced the danger arising from congestion or panic in case of fire. It, therefore, becomes more necessary every day that strict attention be given by the Inspector to the provision of fire escapes where necessary. In fact I cannot understand why the architects do not provide fire-escapes on all buildings of two or more stories to be used as factories or shops, at the time of their erection.

While I have been successful in having fire-escapes erected in nearly every case where I thought it advisable to recommend one, I cannot say I have done so without a great deal of persistent effort. The trouble does not seem to end with the erection of the fire-escape. There seems to be a

great deal of trouble in keeping the passage ways leading to them clear. It is not an unusual thing to find the window leading to the fire-escape entirely blocked, and if a fire occurred this would render the fire-escape absolutely useless. Much care should be taken in the selection of the location of fire-escapes. The places for their erection should be kept away from the inside stairways with a view to keeping the exits distributed as much as possible. The passages leading to the fire-escape should be kept clear, and the doors and windows leading to them made to open easily from the inside.

Sanitation.

To have all factories in a perfect sanitary condition would be ideal, and I am sure that this is the desire of every Inspector. While such conditions might be attained in some localities, there are many others in which it would be an utter impossibility. In the matter of sanitation the Inspector is placed in rather a peculiar position, inasmuch as he cannot treat every person alike. Before taking any definite action he is compelled to take into consideration the locality and circumstances and act accordingly.

It may be all very well for some one in Toronto to sit down and write a long discourse upon just what the sanitary conditions of a factory should be; but take them into a country town where no waterworks or sewers exist, or in localities where the installation of a water-closet would necessitate the blasting through several hundred feet of solid rock to reach a sewer, and thus it will be seen they would be compelled to come down off their high horse, and, like ourselves, do the best they could under the circumstances.

While desirous of bringing about the best possible sanitary conditions, I am often compelled to countenance conditions in one locality that I would vigorously oppose in another, because of my powerlessness to change them. The property owner cannot do impossibilities, and the only thing we can do is to insist upon him doing the best possible under the circumstances. I have succeeded in greatly improving the sanitary conditions of the factories in my district, and in localities where such obstacles as I have pointed out exist I have in many cases got all I could reasonably ask for; but still they are far from what I would desire.

In the new factories in localities provided with sewage system, I am pleased to say modern conveniences are generally provided, and the sanitary conditions are satisfactory, while in other localities, the conditions are steadily improving.

Foundries.

If there is any one factory or industry which requires special attention or special legislation, I think it is the foundry or moulding shop. I seldom enter one of these places without wondering how men employed in them avoid lung troubles or some other serious illness. There is no other trade to my knowledge where men are subjected to such varied conditions. The employment is of a most laborious character, and the temperature often varies almost from one extreme to another. A person not accustomed to working under similar conditions would find it very difficult to remain in a large moulding shop during the time of casting, even though they were not obliged to participate in the work. The work is heavy, hot, and not without considerable danger.

The moulder is not only compelled to work under the most unfavorable conditions, but the objectionable features seem to occur just at the time they are the most injurious. He goes to work in the morning to a shop seldom

as warm as is required to be comfortable in the winter season. By the efforts required to do his work he keeps himself warm, until on in the afternoon, at which time the casting is done. Then comes the metal heat from the burning cupolas, the cranes going here and there with large vessels filled with boiling melted iron, while the moulders are going in every direction with hand ladles, distributing the liquid iron all over the shop. The shop soon becomes heated to a very high degree, and at the same time becomes filled with gases arising from the hot iron being poured into the sand. The man's clothing becomes saturated with perspiration, and as the day's work ends with the casting, they are in almost all cases compelled to go out into the cold in that condition.

In my opinion, all shops of this kind should, where possible, be provided with bath rooms, where men could bath and change their clothing before going out into the cold air.

Canning Factories.

As the general conditions existing in canning factories are of such vital importance to the general public, it might be well for me to have a few words to say upon the subject before closing my report.

There being comparatively few canning factories within the district assigned to me, it would probably be unwise or unfair for me to speak in a general way of the industry. I have no doubt that some of my colleagues will issue a lengthy and complete report of canning factories. I will, therefore, confine myself to the few factories of this kind within my district, upon which I wish to make but few remarks.

The canning industry, like all others, is not without its difficulties as well as its peculiarities. The question of help or labor is a very difficult one, owing to the fluctuating character of the work. One week they are working overtime, while the next week they may have nothing to do, and this during the busy season. In fact, it might be said there is only one season, and that the busy season, which, as if to increase the difficulties, is but a very short one. Owing to the temporary character of the employment, the help in many cases has to be brought in from outside neighborhoods and housed by factory owners. This to some extent brings the residences of the employees, as well as their mode of living, under the observation of the inspector.

I desire to state in reference to the canning factories within my district, which I visited several times during the past season, that while they were in a fairly satisfactory condition in many respects, they could be vastly improved, and I have no doubt will be improved by frequent inspection and the necessary moral suasion. I found some little difficulty to persuade the men in charge of these factories of the great necessity of strict attention to cleanliness in the utensils used, as well as among the employees. Basins for washing, and clean towels were very little in evidence upon my first visit. I am pleased to say, however, that upon my second visit there was a marked improvement in this regard. Another feature to which I found it necessary to give close attention was the employment of children under the required age, having found upon my first visit that every canning factory in my district has to a more or less extent violated the law in this respect. I herewith append a report of accidents reported.

All of which I have the honor to submit.

Most respectfully yours,

R. Hungerford,
Inspector of Factories.

REPORT OF INSPECTOR THOS. KEILTY.

To the Honorable the Minister of Agriculture:

SIR,—I have the honor to submit a report of the inspection of factories and shops in the district assigned to me during the year just closed.

The individual reports of this year's labor does not cover so much territory as that of former years, caused by the sub-division of the Province into smaller districts, consequent upon the increase of our staff.

However, the progress made has been fully up to the most hopeful expectations, and fully justifies the wisdom of maintaining an efficient staff of inspectors whose districts will not be so large as to hamper the thoroughness of so important a work.

The year just closed has been eventful, and productive of many features of more than passing interest to the department of Factory Inspection.

Beginning in the early part of the year, reports came to our Chief Inspector (Mr. Burke) that some of the large buildings in the city of Toronto which were used in part as manufacturing establishments did not guarantee such a degree of safety for the persons employed therein, and persons having access thereto, as was required by the Shops and Factories Act.

In response to these complaints, your Chief Inspector directed me to undertake an investigation of the parts complained of, with the result that I discovered a task of very large proportions, covering a report of 34 pages of typewritten foolscap, which was compiled after a very careful and thorough investigation, and which embodied several recommendations touching the parts affected, and which should be a means of having such corrections made as would provide the standard of safety suggested in this report.

This question prompts me to suggest that, in our large cities to-day there are maintained several places of business accessible to a large concourse of public traffic which are constantly in danger of the calamities which have befallen places where safeguards were supposed to have been amply provided to guard against these dangers.

I refer to the large or departmental stores, office buildings, and such other public buildings as are accessible to a large volume of public traffic, and which because of the definition "employees," does not come within the jurisdiction of the Shops and Factories Acts in this Province, except as to the protection of the persons employed therein.

The public are unconscious of these dangers, and approach these places with an air of security, never thinking when going up an elevator, or several flights of stairs, what might happen among several thousands of persons on the different floors should a fire break out, or a panic occur through false alarm, or from any similar cause. These persons never realize that anything should prevent them from going quietly out as they came in. The lack of knowledge of danger, or the consequences leading to danger, should be a sufficient reason to surround that danger with all the security available.

Occasionally—fortunately not frequently— we hear of some great calamity where a large number of lives were sacrificed through a panic, or defective means of escape, or some similar cause. What does this teach? First, that if a large number of persons were not on the premises they could not have been injured or killed; and again, that it is only where a large crowd of persons are assembled that it is possible for such a calamity to occur.

During the past year two of such accidents were recorded, one at Collingwood, Ohio, where 163 school children lost their lives by being burned to death through defective construction in a school building; and the other at Hochelaga, Quebec, where 16 pupils and their brave teacher (Miss Sarah Maxwell) lost their lives.

These terrible calamities caused an awakening of public sentiment to the dangers so definitely portrayed, with the result that special enactments were adopted providing for better equipment, and touching other phases relating to schools in the sections immediately affected by these calamities.

This also had a vibrating and awakening effect throughout the entire continent, attracting attention wherever such dangers were evident. But, how much better it would have been if action were taken before being prompted by such a terrible lesson.

It is needless for me to offer further testimony as to the dangers ever present from fire and panic where a large number of persons are assembled, but I may be pardoned in referring to another case, because of its seeming immunity from such danger. I refer to a fire and panic which occurred a few years ago at a Church Bazaar, held under canvas in the city of Paris, France, whereby 60 adults (prominent people of Paris) lost their lives.

The dangers from this source is very much intensified in departmental stores during the holiday season, when these places are visited by eager throngs of shoppers; and it is very creditable to the management of such places that more frequent accidents do not occur in a general way.

There is the danger of accidents from elevators ever present, where such a large number of persons are carried up and down, fortunately, with a minimum loss of life or accident.

But we must not lose sight of the fact that there is a misplaced confidence reposed in elevators as a means of escape in event of fire or panic. This erroneous idea is so well established, that we invariably find the proprietors or owners of such establishments point to the elevator as an execllent means of escape in event of fire or panic.

There are very few elevators that could be regarded as a means of escape, especially in such places as are referred to. Elevators in such places as are used for passenger traffic are invariably inclosed with an open iron grille work which permits of a free volume of smoke or flame to all flats; in fact, it provides a funnel or shaft for conducting the fire to all parts, thereby removing any possible value it might have as a means of escape.

And I would suggest that in all such places elevators should be installed in an enclosed tower with suitable fire-proof windows for light and ventilation, and that a close door be provided for each opening, so arranged that the car could not leave that floor until the door was securely closed, and that the door could not be opened until the car had reached the proper floor level. With these precautions, an elevator might be regarded as an additional means of escape in event of fire.

Another feature that is introduced in some stores and public buildings, which has decided disadvantages in event of a panic, is the revolving door. These are in some cases used only during the winter season, being entirely removed during the warm weather, but in any case their use or adoption carries grave dangers and inevitable calamity in event of a crowd of persons requiring to get out quickly.

While on this subject, I may add that while it is essential that cities, town and municipalities should be given a full sense of jurisdictional latitude in the government and regulation of their local business and institutions, I am of the opinion that it would be to their advantage as well as that of the

public, if the safety equipment of all public buildings and places subject to public traffic or business or pleasure were subject to a statutory enactment governing their safety equipment and inspection. The Province of Quebec has had such regulation in operation for some time, with apparent good results. The same applies to many of the States. The last to fall into line was Ohio. Immediately following the Collingwood disaster, all public buildings were placed under State control, and drastic regulations were enacted for the protection of school buildings.

Local conditions are often subject to such elasticity as to remove unconsciously the elements of safety that should be ever present where danger may be obscure, yet quite possible. And in the smaller cities or towns this suggestion would apply with greater force, because the inhabitants are not accustomed to the clang of the fire gong to sharpen their sense of danger, which in time becomes dormant. Nor are they usually provided with a system of water works at high pressure, and other equipment, to combat the dangers consequent to a fire. All these conditions justify the suggestion calling for a periodical inspection of these places by a man who is not aroused to a sense of duty because of the happening of a serious accident in this town last night, or perhaps the town adjoining.

Another feature becoming quite prominent, and to which is attached elements of danger, is the moving picture shows. We find these in nearly every town of any size in the Province, some of the larger towns having as many as two or three of these shows, and the cities one on every business thoroughfare. The greater danger from these exhibitions lies in the fact that they are largely patronized by women and children. I am informed that in the larger cities, by-laws are enacted governing their equipment, location, exits, etc., but in the smaller towns usually a vacant store is available, and the principal question involved is the rent for the place of business. As soon as the show is in progress, mothers with their children partake of the enjoyment, unconscious of the danger lurking within the very walls in which they have planned to spend a pleasant hour. It is presuming to say that there is danger from those exhibitions. Unfortunately, there are many serious and fatal accidents recorded against these places of amusement. I do not wish to infer that the amusement is harmful or illegitimate, but the safety of such places should be regulated and inspected by a competent person before being accepted as a place of public assemblage. I may also add that the moral phase should not be overlooked in providing a place of entertainment largely patronized by youths whose minds are susceptible to the educational influences presented.

In the Province of Quebec, and many of the States, the local Governments have enacted and provided for the enforcement of regulations governing all features of these places of amusement in the public interest.

General Conditions.

It is difficult to present a report of general conditions without involving questions whch would form and partially becomes a part of a separate subject. However, I am pleased to report that the progress of industry and the equipment for the safety and protection of employees in factories has made very favorable progress during the past year. I might refer in particular to the installment of guards on shapers, buzz planers and factory a rip-saw, shaper and buzz planer equipped with practical guards to proson. During the fall of 1907 there was on exhibition at the Toronto Fair, a rip-saw shaper and buzz planer equipped with practical guards to protect the operator from being injured by these machines. Since that time

I have seen more guards applied to these machines than during my previous years of inspection; which demonstrates that, generally, manufacturers are desirous to protect their machines when they are convinced that a practical means is available. And next to this public exhibition given at Toronto Fair was the Appendix to the Inspectors' report of 1906, showing cuts of devices available for guarding dangerous machines. These illustrations have simplified the explanations of the inspector in a marked degree, and placed in the hands of the manufacturer a knowledge illustrated beyond the skill of any inspector. As stated in former reports, I am still convinced that our department will not be complete until we have provided a modest little museum showing in practical form the different devices available for the protection of the dangerous parts and processes incidental to manufacture. This form of education is most practical, and is receiving the earnest attention of the Departments of Factory Inspection in the United States, and has long since become a prominent feature in European countries.

Other conditions have manitained their reputation for progress, although there was throughout the year a marked tendency to curtail the manufacture of some lines of goods. This applied in a general way to the lumber industry, which was not worked up to the standard of other years, and which had the effect of providing a more skilled class of workmen through the reduction of former staffs who were employed when the mills were operated to their full capacity, and thus averting the cause for accidents and the employment of boys under the required age, which is another evidence of the great regulator of supply and demand.

Another industry which is closely allied, if not a part of the lumber industry, is the manufacture of pulp, and which follows into the manufacture of paper. Within the last few years this combined industry has assumed large proportions in this Province. In the past the manufacture of pulp was an almost distinct occupation, but of late many of our large lumber mills have turned their attention to the manufacture of pulp; or, at least, where this is not done, to the supply of pulp material. The latest to enter this line on a large scale in my district, is J. R. Booth, of Ottawa, who manufactures lumber, pulp, and paper at his extensive works in the above-named city, employing an aggregate of twelve hundred men. And in justice to their enterprise, I am satisfied that his new pulp and paper mills are among the best, if not the best, on the continent, from a constructive, sanitary and safety standpoint. Of course, this plant being recently constructed, would have the advantage of past experience in remedying defects in constructive safety and sanitary appliances. But experience has convinced me that unless humanitary interests and modern enterprise are combined, we cannot hope for the best results. My only purpose in referring to this particular plant is to give credit where credit is due, and with the hope that what I have to say will be of benefit to other similar industries in remedying defects that exist in or about their premises.

A plant for the manufacture of pulp, or pulp and paper, requires a large amount of heavy machinery and shafting. This machinery in some parts is operated at a high rate of speed, and necessarily requires a good substantial foundation, not only in behalf of the life and duration of the machine, but also its safety and effectiveness. It also requires that its dangerous parts be securely protected against accident as far as practicable. Then the shafting, counter-shafting, and couplings require to be put up in a substantial and well balanced manner, and lastly, securely fenced and protected in all parts exposed to traffic. This latter direction also applies to pulleys, belting and drives. All stairs and openings should be securely railed, also

planks or gang-ways provided for oiling, or as a means of access to any part of the machinery or shafting, should have strong and suitable hand-rails for the protection of persons whose duties require them to have access to such parts.

In putting up handrails or protection of any kind, do so with the object of making that part perfectly safe. I have in mind instances where railing was put up at the direction of the Inspector, and I afterwards discovered the danger had increased because of the temporary nature of the protection. If a man were to turn his cattle into a field where there was an open well, he would not simply throw a rail across that well to protect his cattle, but he would put a substantial fence around the well to protect them. The same applies more forcibly to the railing or fencing of dangerous machinery. where human life is at stake. Strange to say, however, some persons consider their legal obligations only, and these in a literal sense.

Another phase of this industry is its sanitary effects. It has been proven beyond doubt that certain processes in the manufacture of sulphide pulp are very injurious to workmen; the evil effects from these processes has been practically removed in the system installed in J. R. Booth's mills. The injurious effects consisted in the presence of sulphuric acid gas in such quantities as to contaminate the air in a very harmful degree, and thereby cause the workmen to inhale almost continuously during working hours this poisoned air. The origin of these gases is found to be principally in the washing tanks. After the pulp chips are cooked in the digester tanks and impregnated with sulphuric gas, they are usually emptied into a large tank to be cooled, washed, and conveyed to another process, and some of these tanks are open, permitting the gases to circulate throughout the entire premises. This system provides for the removal of the wood pulp by conveyors in a semi-dry state after the water which cools and washes has run off at the bottom of the tank. The process installed by Mr. Booth provides a closed tank, in which the cooked pulp is emptied, after which the washing and cooling water is turned on and the whole is reduced to a slush, which in turn is pumped up to a further process, allowing the sulphuric gas to escape through a ventilator, twelve by sixteen feet, and extending fifty feet above the roof. The system also provides a spray of pure water constantly pouring on the air which passes through this ventilator, to wash the gas from the air as it passes out over the city. Thus it will be seen that there is very little chance for the escape of injurious gases. Of course, poorly constructed or leaky pipes conveying the gas from the furnace to the digester, will readily give rise to trouble from this source, but this is a condition which can easily be remedied. In justice to those who have plants of the old type, it would hardly be fair to ask them to re-construct their system along the lines described, as it would involve a large expenditure; but in view of the serious consequences to persons employed in these places, I would feel justified in requiring a fan installed so as to suppply fresh air to workmen whenever engaged in these cooling tanks.

Boiler Inspection.

The usual progress has been made regarding the inspection of boilers. In each place visited where a boiler was in use I took occasion to advise the engineer and proprietor of the provisions of the new law regulating Stationary Engineers. Now that arrangements have been made providing a board of examiners we look forward to the opening of an improved service and regulation during the coming year.

Child Labor.

I am pleased to advise that very few violations of the laws governing child labor has come to my notice during the year, and in each case dealt with it was found that the child so employed was only temporarily relieving an older brother or through some similar cause. However, it was contrary to the provisions of the Act, and when the employer was directed to these provisions the boys were sent home.

In view of this satisfactory state of affairs, it might be said that I should have no complaints to offer.

I have expressed my views on the question of child labor, education, and morals at length in former reports, and since expressing these opinions I have not changed my opinion; but subsequent conditions and expressions of views and experiences have rather confirmed the belief that we should take time by the forelock, and surround our children with such legislation as would ensure a recognized and established period during which every child, be it the offspring of rich or humble parents, shall be permitted to enjoy the blessing of childhood and be given the opportunity to prepare itself for the stern realities of life and progressive and useful citizenship.

We point with pride to the care and protection that we bestow on our natural resources such as forests, lakes, rivers, mines, fish and game. All have protective laws that permit of their development and future use. These resources are not conserved altogether from a humane standpoint, but because they are assets upon which the country must depend for revenue to ensure its maintenance and perpetuity. The most valuable asset that a country has is its children—its boys and its girls. This asset should be safely guarded and protected, for upon its careful development both in numbers and intelligence depends the future standing and existence of a country. The Children's Aid Society of this Province are doing a heroic work in the emancipation of neglected children, dependent almost upon charity. But the work of child rescue should be raised above the taint of charity. And these self-sacrificing and worthy people who devote their time, money, and effort in reclaiming children whose parents may be unfit or unable to properly care and provide for them, should be provided with a generous public fund to carry on this noble work in the interest of the country as well as that of humanity.

There are cases where parents, industrious and frugal, are struggling against adverse circumstances, and making sacrifices that are almost beyond human endurance in order that their children may be fitted to occupy a higher plane than was their lot, and become useful and respected members of society. But there is a limit beyond which even necessity cannot go without coming within the bounds of charity, and the children are necessarily taken from school, and they become members of the unnumbered struggling for an existence and relegated to the lower strata of society.

The parents who have the courage to raise a family of God fearing and law respecting boys and girls, thereby adding to the country's richest asset, should be assisted if necessary from a "hero fund" provided for the purpose, and not be obliged to depend upon doled out charity.

While there are many sides to this question, so much so that the most advanced students of social reform proceed with caution when discussing it, yet all are agreed that present day methods and conditions as applied to many children's lives are not conducive to health, morals, family associations or good citizenship.

In the State of Ohio, some very advanced laws have been recently enacted relating to the care and education of children, and for your information I will give here a brief summary of these enactments as follows:

"Child Labor Laws as passed by the General Assembly of 1908, and effective July 1st, 1908:

I. Employment of minors under 14 years of age is strictly prohibited.

II. Schooling certificates for all minors between 14 and 16 years of age are required.

III. Boys under 16 and girls under 18 years of age must not be employed more than 8 hours in one day, nor more than 48 hours in one week.

IV. Boys under 16 and girls under 18 years of age must not be employed later than 6 o'clock in the evening nor earlier than 7 o'clock in the morning.

V. No minor under 16 years of age can be employed at dangerous machinery or where its health will be injured or morals depraved.

VI. No female under the age of 16 years shall be employed at the tobacco trades nor at employment compelling her to remain standing constantly."

The maximum penalty for violation of these laws is two hundred dollars, or imprisonment for six months.

In order to more clearly define the nature of employment prohibited by these enactments, I will give here section 1 of the Act as follows:

"Section 1. No person, firm, company, or corporation operating a factory, workshop, business office, telephone or telegraph office, restaurant, bakery, hotel, apartment house, mercantile or other establishment shall at any time employ, permit or suffer a child under the age of fourteen years to work in or in connection with any of the aforesaid establishments, nor in the distribution or transmission of merchandise or messages; nor shall a child between fourteen and sixteen years of age be employed, permitted or suffered to work in or in connection with any of the aforesaid establishments, nor in the distribution or transmission of merchandise or messages, without first procuring from the proper authority the age and schooling certificates prescribed in section 4022-2 of the Revised Statutes of Ohio. The aforesaid certificate shall be fyled in the office of the establishment in which or in connection with which the child works, and shall be produced on request of the inspector of workshops and factories, or a truant officer. On termination of the employment of a child whose certificate is fyled as aforesaid, the certificate of said child shall forthwith be returned by the person or agent having charge of or the management of any of the aforesaid establishments to the superintendent of public schools or such other person who, acting under legal authority, may have issued the aforesaid certificate."

It will be seen that the foregoing provisions practically cover every form of labor in which a child may be employed, and that provision is made for the existence of a legal certificate which may be accepted by the employer and the inspector with very material advantage to both.

A full text of the Statutes relating to the employment and education of children can be procured on application to J. H. Morgan, Chief Inspector of Factories, Columbus, Ohio. The legislation referred to also covers the construction and equipment of schools, and provides for their inspection and contains useful information to persons interested in these questions.

It has been demonstrated that an educational test has its advantages in the enforcement of child labor laws. It is a common occurrence for parents or guardians to falsify a birth certificate. But there is no way to escape an educational test, and if such a law were enacted it would be an incentive for parents to send their children to school in order to prepare them for the factory.

When entering upon this subject I intended to be brief, but there are so many points which appeal to our human instincts that it is difficult to separate them from the general subject, each country and individual advocating regulations which have an ultimate purpose and object, and which are faithfully portrayed in the following words delivered in the course of a speech by Macaulay in the British House of Commons, in 1846: "Never will I believe that what makes a population stronger, and healthier, and wiser,

and better, can ultimately make it poorer. If ever we are forced to yield the foremost place among commercial nations, we shall yield it to some people pre-eminently vigorous in body and mind."

Several phases of this question were presented in papers and discussions at the twenty-second Annual Convention of the Association of Factory Inspectors, which should be of special interest, because these questions are dealt with by this association in light of practical experiences.

Employment of Women.

Next to that of the employment of children is the employment of women. Our Factory and Shops Regulations define the number of hours which women may be employed in any one day, and the total number of hours which they may be employed in any one week. It also provides that women must not be employed before seven o'clock in the morning nor later than six o'clock in the evening "in shops," except as provided on Saturday or the day preceding a statutory holiday, and in factories later than half past six o'clock in the evening, except as provided in the granting of a permit covering thirty-six nights in the year, when a woman may be permitted to work as late as nine o'clock in the evening. The above regulations do not apply to shops during the period between December 10th and 24th.

There have been no violations of the above regulations which have come to my notice during the year, but past experience would warrant me in suggesting that the law be amended so as to define the hour when women employed in factories should start their labors, and that the law be extended to include other places where women are employed that do not come within the regulations of the Shops and Factories Acts. Apart from the protection required, there is an equality often demanded which the Inspectors are obliged to explain when asked, "Why do these regulations not apply to persons employed by So-and-So?" by saying "Our factory laws does not apply to this class of employment or to these institutions."

In nearly all the millinery and dressmaking shops throughout the Province there is a period preceding their opening season when the nature of the business requires them to work overtime for a week or ten days. During the past year I have found that several of these places had neglected to obtain a permit for such overtime, not through a wilful desire to evade the law, but because the requirement was overlooked. In each case they were desirous to secure the permit when the requirement was explained to them.

Amendments to the Shops and Factories Acts.

During the Legislative Sessions of 1908, the Shops and Factories Acts were amended, principally relating to the regulation and employment of minors.

As the amendments to the Factories Act apply wholly to the employment of persons in canning factories, I will not refer to that, as there are no canning factories in the district allotted to me this year.

The amendments to the Shops Act also relates to minors, and in view of the unlimited freedom in the employment of this class in the past, I have taken the stand of educating the persons interested before applying harsh measures in enforcing the requirements provided in these amendments; and for the purpose of again putting these amendments before the persons interested, I feel that it will be an advantage to refer to them in this report in order that all may become acquainted with their provisions.

1. Section 6 of the Shops Regulation Act is amended by striking out the word "ten" in the first line of the said section, and substituting therefor the word "twelve;" and by adding thereto the following words: "and no child shall be employed in any shop during the hours of holding school unless the said child shall have furnished to the employer a certificate issued in accordance with the provisions of The Truancy Act, permitting the absence of the said child from school, which certificate must be kept on file by the employer and produced, whenever called for, for examination by the inspector.

INTERPRETATION.

Child, means a person under the age of fourteen years. Inspector, means any one of the factory inspectors.

It will be seen by these amendments that a child under twelve years of age can at no time be employed in a shop, and that children between twelve and fourteen years cannot be employed during school hours except holding a certificate as above provided.

All other places coming within the meaning of the Shops and Factories Act have received my earnest attention during the year, and I am pleased to report a marked progress in the improvement and safety extended to these places.

PROSECUTIONS.

I am pleased to report that my only access to the Courts during the year was in a case where I was subpœnaed to attend court to verify some communications between myself as an Inspector and a manufacturer who was being sued for compensation as the result of an accident in his factory.

This case seems of sufficient interest to warrant me in giving a brief resume of the cause which led to my presence in court.

Some months previous to the accident I visited the defendants' factory and instructed that a device be provided whereby the operator would have control of the power by means of a bar or lever, so that he could throw the machine out of gear in event of an accident from any point of operation. I may add the machine in question was a large set of rolls used in mixing rubber. These rolls were about five feet long and fourteen to sixteen inches in diameter, revolving inward about sixteen to twenty revolutions per minute. It will readily be seen that if a man or any part of him were to get caught in these rolls how essential it was to have a means whereby they could be stopped quickly, as a powerful machine of this nature would slowly but surely drag a man to serious injury if not immediate death.

At the time of my visit to the factory, the (then) superintendent told me that as they were building a new factory it would hardly be fair to ask them to go to the expense of installing these devices, but that he would assure me that in putting their machinery into their new factory they would provide every safeguard available to protect their employees.

To this arrangement I agreed, and on returning to the office I wrote the firm a letter instructing that these safeguards be applied to these machines as soon as they were installed in their new factory. Subsequent to my interview, there had been some changes of management, but the secretary-treasurer wrote me in reply to my letter that my instructions were being carefully observed. Some months later I received a notice from this firm of the happening of an accident to one of their employees whereby he lost his hand in one of these machines in the very way which I had described, and in order to prevent further injury a bar had to be thrown into the gear of the machine to stop its motion, breaking the machine and causing a monetary loss of several hundreds of dollars besides the irreparable loss of the man's hand.

Accompanying the report of the accident was a letter of regrets, and asking if I could offer any further suggestions in the way of safe-guarding the machine in question, all of which led me to believe that they had fully carried out my instructions. But to my surprise, when the case was presented in court, it was shown that no guards had been applied to the machine, although the guards had been purchased and were on the premises. It may be information to add that these machines are now supplied by the makers with these very devices which I suggested.

The case was tried under common law, and a verdict of $4,500 was awarded the plaintiff with costs. The trial Judge said that if it were decided that the case should come under the Workman's Compensation Act that he would be inclined to allow the plaintiff the full amount provided by that Act.

This should be a valuable lesson to manufacturers to not put off the guarding of dangerous parts until some serious accident occurs, especially when directed to do so by an Inspector. The Inspector does not pose as allwise in pointing out these defects and dangerous parts, but does so along the line of his official duty, and the knowledge gained by daily contact with these conditions makes his periodical visits valuable to the manufacturer.

The Inspectors' Convention.

The year just closed has been a favored one to the Ontario Inspectors inasmuch as the International Association of Factory Inspectors held their annual convention in the city of Toronto. The features of advantage, perhaps most prominent, is the opportunity presented whereby the entire staff can partake of the valuable experience and views of the Inspectors who represent departments all over this American Continent. I feel justified in expressing the opinion that this convention was one of the most successful in the history of the association. A large number of practical and scientific papers were read and discussed, covering a variety of subjects of special interest to the Inspectors as well as to the general public. A feature of gratification to the Ontario Inspectors was the election of Mr. James T. Burke, Chief of the Ontario Department, to the honored office of President of the Association. The next convention will be held in Rochester, N.Y., during the week of June 14th, 1909.

In the re-organization of the districts assigned to the different inspectors I found that the heavy and most continuous part of my duties lay in the vicinity of Ottawa, and that in connection with my official duties it would be a decided advantage both to me and the department if I were to take up my residence in Ottawa. To me, because the location being more central in the district, I could reach my home at night more frequently, and to the department because of being more central in the district, it would be saved much in transportation. Accordingly, with considerable inconvenience and expense, and not a small degree of regrets in leaving my old friends of a lifetime, I moved to Ottawa on the first of October, and am now fairly settled. I feel confident that we will not be disappointed in the advantages referred to.

I cannot close without saying a word in reference to our late Chief and Minister, the Hon. Nelson Monteith. During his incumbency we had learned to admire his keen perceptibility of duty, yet ever pleasant smile and temperament. From the Inspectors he received loyalty and devotion, and in return the confidence, respect, and forbearance of a worthy master was extended to each and every one of us.

And for his future happiness and success, I beg to tender my heartfelt wishes; and to his successor I extend that same loyalty and support that was given Mr. Monteith, and trust that our relations may always be of as happy a nature and result in success.

I desire to state that during the year my relations with our Chief Inspector and his superiors, and all those with whom I came in contact in the discharge of my official duties, have been of a most agreeable nature.

The accidents happening in my district being reported to the Chief Inspector, he will, no doubt, give a record of them as may be required.

All of which I have the honor to submit.

THOS. KEILTY,
Inspector of Factories.

REPORT OF INSPECTOR FRED. KELLOND.

To the Honorable the Minister of Agriculture:

SIR,—I have the honor to submit a report of the inspection of factories and shops in the district assigned to me; namely, G. T. R., Hamilton west to London, (exclusive) all south and east of this line, for the year 1908.

While I am able to report the establishment of several new industries in my district, still the general condition of trade has been quiet, and very few of the many industries have been running either with a full complement of men or on full time. The textile workers were kept busy during the early part of the year, but in the late summer and fall they have shared the dull times with the other trades. The iron trade felt the depression very much; with the exception of one or two plants which were engaged in manufacturing for the export trade, less than half time was the rule. Agricultural machinery and wood trades in general shared the same fate. During the last two months a more optimistic feeling seems to have been created or arisen, and while there has been no very marked improvement, there appears to be a general feeling that trade will be better after January 1st, and that the spring will see a very general revival of trade. The canning factories had a fairly heavy pack; fruits and vegetables of all kinds were plentiful and good. The effect of the dry, hot season was to ripen fruit and vegetables very quickly, and meant a very busy short season for the packers. Canners state that the tomato crop was never in better shape, and yet the season was the shortest on record.

GENERAL CONDITIONS.

I am pleased to be able to report that the general condition as to ventilation, sanitation, etc., are improving at every inspection. In the case of new plants the comfort and wellbeing of the employees were being well looked after. Large, well lighted and well ventilated workrooms being the rule. Sanitary conditions, in the shape of clean and roomy lavatories, are carefully looked after and kept clean. Improvement in lavatories is a difficult problem where there are no sewers, but my opinion is that a more general adoption of septic

tanks would be a great improvement. The J. Bertram & Sons Co., of Dundas, have had septic tanks in use for some time, and they have given the greatest satisfaction. The number of this firm's employees will average about 400 men. I regret to say that some of the employers stated that the persons for whom the conveniences were arranged did not appreciate them, and caused a great deal of trouble and expense by clogging up the waste pipes with all manner of foreign matter. In all such cases I have held that such action was due either to ignorance or to wanton vandalism, and have advised a little watchfulness. If the former, instruction would right matters; if the latter, the prompt discharge of the guilty party would be the proper course. This, I think, is the only method, as I am sure the majority of the employees do appreciate all efforts to make their position comfortable, and the reward of the employer who provides a clean, comfortable factory will be a better class of workmen and less dissatisfaction in his factory.

Iron Industries.

With regard to such general conditions, some of the best plants in my district are in this class, also some of the worst. I have in mind one firm engaged in structural iron work, employing about 150 men. The buildings are high one-storey buildings, well lighted at sides and with large sky lights, having the best of ventilation and a perfect system of heating. They are fitted throughout with cranes operated by compressed air, and which are so placed in every part of the building that no employee is called upon to do any heavy lifting. Dining rooms are provided, fitted with wash basins, and reading rooms furnished with magazines. Flush water closets in different parts of the plant are all kept in the cleanest possible shape. All foundries, I am sorry to say, are not thus, but I find improvements at every visit.

Moulding shops have had my attention, and I have endeavored to impress upon employers that an effort should be made to improve conditions. A moulder's occupation at best is not the most pleasant, and some provision for a comfortable "wash up" after the day's "cast" should be provided; but as the general custom among moulders appears to be to get home as quickly as possible after the "pour" it makes the introduction of this idea difficult; but I hope by staying with the proposition to accomplish something.

The proper ventilation of polishing rooms is another phase of the metal industries that I have tried to pay special attention to, as I think a dusty polishing room a most unhealthy place to work in and should not be tolerated, as it is not in any way a necessary condition. With the introduction of exhaust fan systems practically all the dust from either grinding or buffing wheels can be taken off the wheels and not allowed to get into the room to be taken later into the lungs of the operators. I find all too many polishing rooms are not as they should be, but I am pleased to say I have succeeded in getting a number greatly improved and in some cases made entirely satisfactory. One great mistake made in the installation of an exhaust fan system is that the employer will buy an exhaust fan that he thinks will do and get his handy man or local tinsmith to put in the piping, when it is altogether likely that the man never saw an exhaust system, much less had any experience in installing one, and is entirely ignorant of the first principles governing such a system. Hoods are put on the wheels all alike without any consideration as to the work to be done, and when the polisher attempts to use the wheels he probably finds the hood in the way. It is thrown off so that the article can be polished or ground, and the employer

immediately says "the men will not use what we provide." My idea is to get expert advice as to size and description of fan, and have experts install the system to suit the particular kind of work done. In this way better work will be done and less power used, as right sized fans properly installed can be run at slower speed, saving wear and tear on the fan, and it will also save wear and tear on the man, who will not lose time through sickness. Finally, taking the honest view of the matter, "it pays." I am sorry to say that I think there are operators who do buffing and polishing, and do not care about cleanliness of their surrounding, and will not appreciate what is done for them in this way. All I can say about such is that were I an employer I would not have them on the job. The use of emery wheels for grinding forms another important item in factory life, and is at times attended with great danger. Ask the emery wheel manufacturer what is the best protection against accident from bursting emery wheels, and the chances are he will say "buy our wheels;" and it is probably a fact that with proper care as to the setting the wheel, proper speed, and having the machine firmly set, the chances of the wheel bursting are small, as all reputable wheels are carefully tested before leaving the factory. It is also an undoubted fact that accidents do happen. Wheels do burst sometimes, and where no safe-guards are provided such accidents are generally attended with very serious and frequently fatal results. After having investigated several accidents which occurred through the bursting of emery wheels, and hearing the opinions of a number of emery wheel users, my opinion is that safety collars constitute the best safe-guard against such accidents. I have in mind one large firm that uses a great number of emery wheels of all sizes, from wheels 48 inches in diameter down to the smallest, and every wheel is provided with a safety collar. This firm has had wheels burst into several pieces, but the collars held the pieces in every case. All emery wheels should be guarded in some way.

Attached to this report is a sketch of a guard, designed by C. W. Robinson, master mechanic at the International Harvester Company's plant in Hamilton, and used by this company on all their grinding wheels. This guard can be shifted to suit the wear of the wheels and does not interfere with the changing of wheels.

Guarding Machinery.

Modern industry is becoming increasingly more dangerous, and in the many varied processes involved many cases of accident, resulting in the injury, sometimes in the death of the employee, inevitably occur. The utmost precautions on the part of both employer and employee might reduce the number of accidents, though one can never hope to entirely stop them; but every effort should be made to decrease the number and to reduce the possibility of injury.

The guarding of machinery and dangerous places forms a very important part of an Inspector's duties. I have been able during the past year to have a large number of guards put on different machines as well as have dangerous places, such as holes in floors, drive belts, etc., guarded. I have experienced very little difficulty in having my wishes carried out, especially after the second visit. I say second visit, for perhaps in this connection, if in no other, frequent inspection is fruitful of good results. In previous years the small number of Inspectors in the Province rendered it impossible for Inspectors to see that their recommendation of improvements in factories were followed up; but with the increase in the staff more frequent inspection

is possible, and the procrastinating manufacturer gets a reminder in the person of the Inspector, who drops in to see "how that guard works." Another difficulty, I regret to say, that I have met with is the statement that "My men will not use guards." This is most frequent in wood-working machinery. Jointers, saws, and shapers are the machines in connection with which this statement is made. While I believe this statement to be true in a number of cases, my opinion is that if an employer can make certain rules which he expects his men to observe, *i.e.*, "no smoking," "start at 7 a.m., work till 6 p.m.," and the employees breaking these rules are promptly discharged, why can he not make a rule that guards must be used, and further see that they are used? The Appendix to Factories Inspectors' Reports published last year has been of great assistance in providing employers with information as to the means used for guarding dangerous machinery. Where an Inspector finds fault with existing conditions in a factory and he is able to show in a practical way how improvement could be made, I find that the changes suggested have invariably been carried out. I might mention here a case in point: An accident had occurred in a knitting mill, the operator at a mangle had his hand caught between the rolls and severely burned. While standing at one end of the mangle the operator was too far from the other end to reach the belt shifter. I suggested that a bar be placed across the top of the machine within reach of operator and attached to shifter so as to enable the operator to stop the machine from any part of the feed table. The manager thought the suggestion practical and adopted it.

A fruitful cause of accident in some industries, notably in steel mills, blast furnaces, and foundries, is the large number of a certain class of foreigners, who, although unable to either speak or understand the English language, are allowed to work at and around dangerous machinery without any knowledge of the danger of their surroundings.

On the subject of the guarding of machinery, I take the liberty of suggesting a measure of legislation which I think would do good. I believe that the proper place to put guards on machinery is the place of manufacture, and the proper person to put on the most effective guard on any dangerous part of a machine is the man who makes the machine. If the maker of machinery was compelled to cover all gears and guard all dangerous places on the machine before it left his shop he would use the same mechanical genius to devise guards for his machine as he now does to turn out a better machine than his competitors. When a manufacturer wants a new machine he purchases one, gets it set up in his factory and running nicely, when along comes an Inspector who tells him to put covers on gears, etc. The manufacturer then has to get somebody to start in and tinker at his new machine to safe-guard his workmen, with a botched job as a probable result; whereas if the maker of the machine had been compelled to guard it, the guard would have no doubt been put on to form an integral part of the machine in the most effective manner possible.

First Aid.

In a number of the larger plants in my district I find more or less elaborate provision made for the immediate care of employees injured. Some of these firms have a separate hospital room supplied with everything needed in connection with first aid, and in charge of a trained nurse. At the

establishment of John Bertram & Sons Co., Dundas, a branch of St. John's Ambulance Association of London, England, is founded. The members are trained in caring for the injured promptly, and to exercise presence of mind in treating the injured until the arrival of medical aid.

Fire Escapes.

I have secured the erection of a number of fire escapes on factories and shops during the year past and have several now under consideration, which will be put up in the near future.

Boiler Inspection.

This branch of my work I can report upon favorably. I found quite a number of small industries in the rural districts, such as grist mills and saw mills with steam boilers in use under what appears to me to be a special dispensation of Providence, but I think I have rounded up the most of them, and I feel satisfied that further inspection will be necessary to maintain the standard.

Canning Factories.

Twenty-four of the canning and preserving factories in Western Ontario are in my district. During the months of June, July, August, and September I made in all sixty visits to these factories and I have to report that general conditions are very good; in fact very great improvement has been made over previous years. I visited most of these factories early in the summer before the packing season started and recommended a number of changes which were fully carried out, and during the season of packing, any suggestion made by me was promptly carried into effect. The factories were all in very clean condition, the drainage in all cases being one of the principal points attended to. Ample closet accommodation was provided, and ample provision made for the employees to wash their hands. Towels are provided, but not too frequently, this being the only fault I could find. The factories employing foreign help, that is where the help lived in the boarding houses of the factories, I found to be an exceptionally good class. These canners have adopted the idea of having a housekeeper in the boarding house, and the effect of this is to keep the house clean and tidy. In respect to these boarding houses I might say that in nearly every case they have either been enlarged or with a less number of people occupying each room, this insuring better ventilation. In every case dining rooms and kitchens are provided. Baths have also been put in, and where practical, flush closets. A very great improvement, and one which I strongly recommend, is the erection of fire-escapes on all boarding houses over one-storey high used in connection with these factories. It is hardly necessary for me to take up space in this report to speak of the almost inevitable result of a fire in one of such places where there are from forty to seventy-five women sleeping in the inevitable frame building with little or no provision for extinguishing fire.

A feature that increases danger, if that is possible, is that probably not one of these people is able to speak or understand the English language. These women are industrious, hard-working, and make good wages. They

come over from the United States, and when the season is over go back with their summer's wages. Industries that hire help which spends the bulk of their earnings in a foreign country do not appear to me to benefit our country to the extent they should.

Apple Evaporators.

I regret that I cannot make as good a report on these places as on the canneries. In fact, as a rule the conditions of the evaporators are bad, and with one or two exceptions no attempt appears to be made to make things right. With a season from eight to twelve weeks long, the idea appears to be that anything is good enough—any old building, so long as it is large enough—is made to answer. There are usually two or three kilns fitted up with a heater to dry fruit; a space to stand fifteen or twenty women to turn apple peelers and a number of boys or men to keep them going with apples; a slicing machine, a conveyor to convey fruit to kiln. After the fruit is dried it is shovelled into another room and pressed into boxes or barrels and shipped. The very nature of the premises precludes any cleanliness, as there is nothing that can be cleaned. There are two or three plants that are pretty nearly all right. Those are now power plants and provision is made for keeping them clean. I made it a point when inspecting the evaporators in my district (or at least all I could find) that the conditions of 1908 would not do for 1909.

Child Labor.

The old subject, but ever a new one. I do not think it necessary in this report to discuss this question. I take it for granted that all agree that the employment of children in factories is bad. I have been very careful in this matter, and have found a number of cases when children have been employed, and have in every case insisted on their immediate discharge, and warned the employer against a repetition of the offence. I would like to say here that the majority of employers do not want children under fourteen in their factories, although there are undoubtedly a few who look upon them as cheap labor and are ready enough to employ them. The greatest difficulty I find is in getting at the age of such children. Size and general appearances do not seem to be very good guides, especially with foreign born children, then, unfortunately, in many cases the parents are the ones at fault. As an instance of this, I might cite a case in a certain factory where I found two boys (brothers) whose ages I questioned. I asked for certificates, these were presented, signed by both parents, and which gave the age of one boy as fourteen and the other fifteen years. These certificates were not satisfactory to me, so I gave them another chance. The father of the boys then went before a Justice of the Peace and declared they were true. Copies of birth registration were got from England which went to show the younger boy was one year younger than the declared statement. I took out a summons for parent, but he saw me first and disappeared. I have mentioned this case as an example of what some parents will do. During my first inspection of canning factories in the berry season I came across a great number of children, some as young as eight years of age. When I ordered them out I discovered I had several irate mothers after me with the statement of "Better here with me than on the street;" but such philanthropy or parental oversight did not suit me, and in every case the children were sent out, and I firmly believe (in the cases of the young children), greatly

to the relief of the factory managers. After my first visit to canning factories, and explaining the amendment to the Act relating to children, I had no further trouble in this in this matter. In the cities and larger towns of my district I get a great deal of valuable help from the truant officers, whom I have found willing to do everything in their power to assist in the observance of the law. I find that the provision in the Truancy Act by which permits are granted for children to stay away from school is sometimes abused. For instance, I found a boy carrying bobbins in a knitting mill and asking him his age he acknowledged thirteen years. I asked the manager why the boy was allowed to work in his factory, he replied that it was a case of assisting to keep the family. Truly, "Charity covereth a multitude of sins." I intimated to the manager that a knitting mill was not generally looked upon as a charitable institution, and advised him to cut out philanthropy and run his factory according to law. In a subsequent conversation with the truant officer I found the boy had a permit to stay away from school. To carry the case to its natural sequence I was informed later that the boy got a job in a store, the age limit in the Shops Act being twelve years.

In closing this part of my report I might say that as far as I know there are no children working in factories in my district at present, but I rather think that there are some places that if they thought I would not be around for a while would help a few "poor children to earn a little money."

In conclusion, I would say that in making this report I feel that there is not much in it that is original, but I have tried to put in it the conditions as I have found them. To sum it up in a few words, I think that whatever good results have been attained towards bettering the condition of the wage-earner is due to three things: Legislation, factory inspection, and the co-operation of the majority of the employers. Of the employers in my district I can only say that as I have found them they are all gentlemen with whom it has been a pleasure to do business, and for the uniform courtesy that has been extended to me by them I return my sincere thanks.

This being my first year as Factories Inspector, I wish to thank Mr. Burke, our worthy Chief, for good advice and kind treatment throughout the year.

I have the honor to be

Your obedient servant,

FRED. KELLOND,
Inspector of Factories.

REPORT OF INSPECTOR S. J. MALLION.

To the Honorable the Minister of Agriculture:

SIR,—I have the honor to submit a report of the inspection of factories and shops in the district assigned to me for the year ending December 31, 1908.

The year 1908 is one that will be long remembered by the public in general, and our manufacturers and merchants in particular, owing to the great stringency in the money market. This stringency gave many of our leading manufacturers and merchants considerable difficulty in financing their business, while others not founded on a sound financial basis were forced to assign. Some of these assignments were manufacturers who had been in business for a short time only, the chief reason for their failure being lack of capital. When the "boom" of 1906 was on, many companies were formed and charters obtained, and as soon as sufficient stock was sold to erect the plant, building operations commenced. When the factory was completed and put into operation many manufacturers found themselves without ready capital with which to carry on their business, and in consequence had to secure call loans from the banks, with the result that when the financial stringency came upon us, the banks recalled these loans, thus forcing many assignments, which of course caused a large number of employees to be thrown out of work, and a slight depression in the commercial interests of our country.

I am pleased to report, that towards the close of the year, a goodly number of our manufacturers informed me that trade was increasing and collections better, and with another good harvest the coming year business will soon regain its former standing.

During the year I have carefully and thoroughly inspected the factories and shops in the district, and have been very courteously received by the manufacturers and their officials on all occasions. I found them ever ready to install the improvements as suggested from time to time, with the result that the conditions in many of the factories and shops are improved and appreciated by the employees in general.

HOURS OF LABOR.

Owing to the falling off of trade, the hours of labor have been materially reduced, the average being forty-five to fifty hours per week, and very few applications for overtime permits have been received. Help has been very plentiful, so much so that some employers have had notices posted at the entrance to their offices informing would-be applicants that their services are not required.

FURNITURE, PIANO AND WOODWORKING FACTORIES.

The conditions existing in most of these factories are good. Ventilation, which is one of the most essential points in the construction of a building, has been well adhered to. I also found the other sanitary conditions in these industries up to the standard. In nearly all cases excellent lavatories have been provided within the buildings with proper ventilation connected therewith. Inside lavatories are of mutual benefit to the employer and employee. If the lavatories are constructed outside at some distance from

the shop, it is a hardship for a workman who perhaps is wet with perspiration, to go out into a rough winter storm, and likewise it is a great loss of time to the employer who is employing a large number of hands. These facts are recognized by our manufacturers, and I am pleased to report that during the year some of those who have been behind the times have done away with their outside lavatories, and installed up-to-date inside ones, while a few who are left contemplate making the change.

The heating of these factories has been well looked after, the fan system seems to be the favorite, and it is giving general satisfaction. The dust has also been taken care of by the introduction of the exhaust fan system. These exhausters carry away the shavings as well, and, besides keeping the air free from dust make the ventilation easier and better, to say nothing of the cleanliness of the shop at all times. Of course, these exhausters can get out of repair the same as any other piece of mechanism, but when the pipes are of the proper size, and the fan speed proportionately and properly looked after, it reduces this possibility to a minimum.

Iron Industries.

I found the machine shops of the district working under fairly good conditions, most of them using modern and up-to-date machinery. Suggestions were thrown out here and there in the line of improvements when I inspected the various shops, and in most cases they were adopted.

The moulding department in connection with shops which manufacture machinery, etc., in some cases need special attention. Improper and insufficient ventilation constituting the chief cause of complaint. The roof of the building would be low with hardly a ventilator in it. Thus when the pouring process commenced the shop filled with gases and vapor in a few seconds. In one brass foundry, where the roof was very low and the shop small, I had an exhaust fan installed which has proven satisfactory, removing the gases almost as quickly as they arise.

The buffing departments of some of the shops have not been up to the standard, and in each case where it was found necessary and practicable the exhaust fan system has been installed. When installing these fans, manufacturers should make sure that they are speeded up properly, for if they are not they will not take the dust away as fast as it is made, and the consequence is you will hear the workmen complain that they are no good, and the hood over the buffing wheels will be removed. The manufacturer of fans is not to blame for this condition of affairs, as I found that a number of manufacturers who use them installed the fans by their own workmen, who are not experts in this line, and who by the way are not expected to be, as this is a special line in itself, and should be thoroughly understood by those who construct them in order to give the best possible results.

Woollen and Whitewear Industries.

As the greater proportion of the help employed in these factories are females, I exercised all possible care when inspecting them, so as to give to the employees good conditions under which to work. In this respect I had the able co-operation of our lady inspector, who rendered all the assistance within her power; and, judging from the few complaints received, we have been fairly successful in carrying out the work allotted to us. The manufacturers of these lines recognize the fact that in order to get the best possible results from their employees, good conditions must prevail, and hence we have had their support in all matters pertaining to improvements.

Steam Boilers and Explosions.

The boiler of a steam plant is one of the most important factors to be dealt with in the operation of a factory, and should be carefully looked after by every manufacturer. It is in this department that a goodly sum of money can be saved or wasted, by proper or improper methods.

In these days we hear the cost of Niagara Power discussed, the principal question at issue being, can electricity be generated at Niagara Falls and transmitted to certain parts of the Province at lower cost than that of power generated by steam?

The question has been thoroughly discussed by all our manufacturers, and in their discussions you will hear some say that they generate steam power at forty dollars per horse power, some fifty dollars, some sixty dollars and so on. While many of these steam plants use the same kind of fuel, some are able to generate their power ten to twelve dollars per h.p. cheaper than others, thus demonstrating the fact, that by careful management of the boiler and engine, a great saving can be made during the year. This saving can only be accomplished by having an industrious, competent engineer in charge, who thoroughly understands his work, and is acquainted with the different problems that arise from time to time in the boiler room. Incompetent men in charge of steam boilers often lead to disastrous results; scale is allowed accumulate, causing corrosion, which may result in a bad bulge in the boiler, and ultimately blow out if not attended to; or flues may be neglected and not properly cleaned out regularly, thus giving insufficient draft to the fire, causing a lack of proper combustion which results in a waste of fuel.

A sad and fatal exhibition of the incompetency of a man who had charge of a steam plant took place on Monday, September 21st, at a small cider mill near Linwood, Ont.

A second-hand boiler and engine had just been installed in the mill, and on the fatal morning of the 21st, Mr. Huber, the owner, with the assistance of another man, attempted to get steam up, and put the plant into operation. The boiler was installed and had been thoroughly overhauled by Messrs. Geo. White & Sons Co., Ltd., London, and tested at one hundred and sixty pounds hydraulic pressure, the safety valve being set at eighty-five pounds. After firing up for some time the steam gauge registered twenty-five pounds, but subsequently did not raise. Mr. Huber, who was operating the plant, continued to fire. After a while the safety valve began to blow. Seeing the gauge at only twenty-five pounds, he thought the valve was leaking, and attached a heavy weight to the lever, which act was the result of a very fatal and disastrous explosion, as it closed the valve and forced the boiler to pressure far beyond its tensile strength, with the result that after more firing a terrific explosion took place, killing Mr. Huber and his assistant instantly, and completely demolishing the entire building and plant. The force of the explosion was so great that a large piece of the boiler weighing about seven hundred pounds was hurled one hundred and seventy-five yards distant.

It is almost needless for me to say, that the direct cause of this disaster was Mr. Huber's inexperience and lack of knowledge in the operation of a steam boiler, as a competent engineer of experience would not have weighted the safety valve down as he did, but would have known, after a reasonable amount of firing, that the steam gauge had refused to work, and would have had the same properly adjusted and tested before proceeding further

with steaming up. As this mill only employed two men, it did not come under the Factories Act, and would not come under the new Stationary Engineers Act, as the boiler was less than fifty h.p.

This again recalls the urgent necessity of legislation whereby operators of all steam plants will have to hold Government certificates to show that they are competent and experienced men.

Accidents.

Accidents will happen although the greatest care and judgment have been exercised, but many take place through gross carelessness, and is is the latter case that we are chiefly called upon to guard against.

During the year fifty-eight accidents have been reported to the Department for my district. Twenty-four of these were slight, thirty serious, and four fatal.

Twenty of the accidents happened to workmen operating woodworking machinery, classified as follows:—Saws, seven; jointers, six; shapers, two; miscellaneous machines, five. Of these the accidents happening on the saws and miscellaneous machines were in most cases slight, while those with the jointers and shapers, were of a most serious nature, the unfortunate workmen in all cases losing one or more fingers.

While the above accidents prove the dangerous mechanism of these machines, I have had considerable difficulty in some cases to get the workmen to use the guards as recommended by our department and adopted by the manufacturers, and it is only after a serious accident happens to a fellow workman that they see fit to use them.

Fire Escapes.

In view of the appalling disasters that have happened in some places in the past, through the want of proper exits in case of fire, I have given this matter very careful consideration. Where buildings did not have sufficient exits from the inside, I had the standard fire-escape erected on the outside of the building, so as to guard against accidents or fatalities should a fire occur.

Shops.

During the year the shops of the district have also received careful consideration, sanitary conditions have been improved and the general condition of the shops made better for the employees.

The shops of the city of Guelph came in for special attention by our lady inspector, Mrs. Brown, and myself. We found that many of the shops were not complying with that part of the Shops Act relating to sanitary arrangements. As the city has just recently installed an improved sewerage system, it was an opportune time for us to improve conditions, which I am pleased to report are well under way, and I hope to be able next year to report that the owners and tenants of the shops of the city of Guelph are giving their employees as good conditions as the law has made provision for.

All of which is respectfully submitted.

Your most respectfully,

S. J. Mallion,
Inspector of Factories.

REPORT OF INSPECTOR H. J. TUTT.

To the Honorable the Minister of Agriculture:

SIR,—I have the honor of submitting to you my first report as Inspector of Factories and Shops during the year ending December 31, 1908.

It is impossible for me to give you a detailed account of my experience, but I am pleased to be able to say that in every place I visited for the purpose of making an inspection I received good treatment, and quite often the managers would express themselves as pleased to have me call. In a number of cases the managers would accompany me through the factory, and if I found a dangerous machine or an ungarded opening we would talk the matter over together, and I believe in every case we came to the conclusion that the danger could be overcome, or at least lessened. I have often received requests to call again at the first opportunity I had and I would find that my recommendations were carried out; and in a great many cases they were. I have also met workmen who were anxious to speak to me and thank me for improvements I had had made, and who expressed a desire that the Government would keep up their good work, for there was much yet to be done.

One of the greatest difficulties I find in connection with my duties as an inspector are in connection with canning factories. This is a rapid growing industry, and it is quite evident there is much yet to be done to bring it to perfection. I believe these factories in my district have plenty of water, but many of them have very poor drainage. The canner apparently had but one object in view when looking for location to build on, and that was to get as near as possible to a railroad station. The question of drainage one would think was not given any or very little consideration. I have had occasion several times this past season to point out this fault, and have recived promises from the managers that I would see marked improvements next year.

I inspected the evaporators in my district. Some of them I found in very good condition, but others just the reverse—some of them not even having wash basins or towels, while others claimed they had them but could not find them just then. Apple peelings and refuse were thrown out of doors and windows and left there until an inspector came around and ordered their removal. Floors were found dirty with insufficient room to turn the apples over while in the process of drying without stepping on them. I made several recommendations in connection with this work, and was careful to explain to the manager all particulars. They in every case fell in with my ideas and promised to carry them out before next season.

Another great question is child labor. I believe many employers try to observe this law. They get birth certificates from the parents or guardians of the children stating that they are of an age that allows them to work in a factory, but I have found out by questioning that the certificates given are not always correct. So anxious are the parents to get their children to work that they sometimes do not adhere strictly to the truth. However, I have followed this matter up pretty closely and expect to find better conditions in the future.

Elevators, fire-escapes, etc., have also received my careful attention. I have given close attention to the general work of factories in operation, and having had years of experience with machinery, buildings, etc., I feel persuaded that this work of inspection is accomplishing good.

Yours respectfully.

(Sgd.) H. J. TUTT,
Inspector of Factories.

REPORT OF MRS. JAMES R. BROWN.

To the Honorable the Minister of Agriculture:

SIR,—I beg to submit the following report of the inspection of factories, workshops and mercantile establishments in the district assigned to me for the year 1908.

Business during the year has been very depressed. Many of the industries have been working with a lessened staff of employees, and also shorter hours of labor. A more hopeful feeling prevails that the depression is nearly over, and that times will improve from now on, which it is to be hoped will result.

With all the advancement in the increased methods of production, it is to be regretted that no method of regulating economic conditions to the requirements of the country has been attained, so as to prevent a recurrence of periodic depressions causing stagnation in business and untold suffering to all concerned, especially to the wage workers.

Defects in establishments which have been inspected have been noted in my weekly reports during the year. While defects have been many, yet conditions have been greatly improved. In some establishments especially where clothing is being made, where cleanliness heretofore has been disregarded in respect to whitewashing walls and scrubbing floors, etc., employers now appear to realize the necessity of conforming to the requirements of having their premises in a sanitary condition.

CHILD LABOR.

While the law in regard to the employment of children is being fairly observed, yet the unsolved problem of child labor is still in evidence. Notwithstanding the high state of civilization which has been attained, it appears to be still necessary to employ children to aid in production, because child labor is cheaper and greater profit can be obtained from the employment of child labor than from that of adults. The crave for cheap goods is universal, and while such is the case little relief can be hoped for in the interest of children. But while much has been effected in restricting the employment of children, it is to be hoped that a still further advance to a higher state of civilization will eliminate the evil altogether.

HOURS OF LABOR.

In some industries especially where machinery is employed, it is considered necessary to work long hours, as it does not pay to keep machinery idle, but the continued strain on the operators tells on the health and tends to shorten life. While the humane employer may deplore the conditions at present existing he is yet powerless to remedy the evil, for, however anxious he may be to improve conditions, he knows that there are others who would still be content to continue in the present rut, careless as to the result to the workers so long as profits were forthcoming.

In some cases where permits have been granted to work overtime, several complaints have been made, and those complaining claim that the strain is too much for them. I investigated some of the complaints, and found that those having permits were not violating the law, and therefore, could do nothing in regard to the matter. One would imagine that there would be

no necessity for working overtime, but it is found that stock gets depleted, neither wholesale nor retail dealers caring to carry a surplus; and while the factory owner may not desire to work his help more than regular hours, he in a measure is forced to do so or loose his trade.

A law prohibiting overtime from being worked would be the only remedy.

Sanitation.

I have observed a great improvement in regard to sanitation in factories or workshops during the year. Up-to-date ventilators have been installed in a number of factories, also a number of new factories have been erected with all the improvements necessary for the health of the employees. I have observed in some of the workshops that nailing down the windows is still practised, the plea having been made that the workers complained of the cold, there not being sufficient heating to allow of window ventilation. In some cases I have recommended that pipes be provided near the floor for the conveyance of heat, as many females complain of cold feet. A number of pipes have been installed, which have given satisfaction. One employer stated he had burned four tons of coal less during the year since the pipes had been installed than formerly. A number of complaints have been received from females who have to sit at their work that a temperature of sixty degrees, which is allowed by the Act, is not sufficient for comfort, and they claim that the temperature should not be less than sixty-five to seventy degrees, where not much bodily exercise is required.

In one factory I inspected, I found the temperature fifty-eight degrees at ten a.m. Some of the females had their coats on, and were actually blue with cold. Some of them had to go home in consequence of insufficient heat. I am pleased to be able to state that the firm has remedied the defect. Where workers are suffering from any defect relating to their comfort it cannot be expected that their labor would be as effective as it would otherwise be, and the great majority of employers do all in their power to have their workers made as comfortable as circumstances will permit, as it is their interest to do. so.

I have recommended that where ventilation is dependent on windows that a strip of wood the width of the window and two or three inches in width be placed in the lower sash, so as to admit the fresh air without incurring danger from a draft. I have also recommended that the windows be left open during the meal hour so as to change the air. Where adopted these plans have been found beneficial. One defect I have noted is the insufficiency of heat, in some cases, not allowing of any ventilation whatever.

Closets.

Where sewers have recently been constructed I have found many stores without closets for male and female employees owing to the change of system, the closets which were outside before the sewers were constructed having been removed by order of the local health authorities before closets had been provided in the buildings to connect with the sewers, thereby, causing suffering and great inconvenience to the employees. It would be well that in such cases that before removing outside closets, the inside closets should be installed. Owing to conditions having been changed in buildings, I have frequently had to order an additional closet for females, and in one instance the remark was made, "Why, that closet has been in use for twenty years, and you are

the first one to take exception to its being insufficient." Having pointed out the law regarding separate closets and separate approaches, I had no further trouble in regard to the matter. I have considerable difficulty in getting the closets, especially those outside, as clean as might be, as many seem to think that cleanliness is not required in outside closets. I have also found a number of closets adjoining each other, and although separated, females object to using such. In such cases, I have recommended one to be built separately for females alone. It is unaccountable, the indifference with which closets are considered, while it is known that such are necessary. Many have to be ordered by the inspector, where one would expect that it would not be necessary to do so. In this regard, as well as other requirements, frequent visits are necessary in order to have the law complied with.

Cigar Factories.

I am pleased to be able to state that there is a marked improvement both in regard to ventilation and sanitary conditions. In one large factory there has been an additional number of closets installed; also ventilating fans, operated by electricity, which have been successful to a large extent in removing the vitiated air, which heretofore had been considered very objectionable. In another large factory they have considered the necessity of better ventilation and additional closet accommodation, and have promised to install such, as they are moving to new premises at an early date. In the small factories there are not so many employed, therefore, the conditions are not so injurious. There is also an improvement in regard to the condition of the floors, which are kept free of refuse, and in a more cleanly condition than has heretofore been the case.

Statements have been made that few, if any, cases of tuberculosis have been found amongst those employed in cigar factories. I have endeavored to ascertain as to the truth of the matter, but it would require a more extended field of investigation to fully establish the truth or otherwise of this statement. I might say, however, that females in a few cases, when they claimed to have had weak lungs, have stated that they derived benefit from working amongst the tobacco, although not using it.

Mica Factories..

Many of the mica factories have been closed owing to the depression, and some of those which have been operated, have felt the prevailing depression, and have not been working full time.

Laundries.

I have found laundries in a fair condition. Complaints have been made in regard to overtime having been worked in some of them. On investigation I have found that the legal number of hours have not been exceeded, and some have had permits to work overtime. This only occurs in the summer season, and before holidays. There have been a number of improvements in regard to ventilators being installed, and new additions having been made in a number of laundries. I have not found much difficulty in regard to drainage, as the flow over of the water from the washers is carried away freely.

I have had some difficulty in regard to the gas escaping from some of the ironing machines, which I consider was deterimental to the health of the workers. Some managers claimed that the escape was not caused from leakage, but was from the taps being turned on and not lit, which would occur through the carelessness of the operators. Owing to the installation of fans the temperature has not been so great in the ironing department as was the case before they were introduced. The sanitary conditions of laundries on the whole have been fair, and a few of them very good.

Rag Sorting.

Rag sorting shops have greatly improved during the year, one large shop having been built with modern conveniences for the health and comfort of the employees. Another one has been moved into larger premises, which will allow of better ventilation, and also admit of being more conveniently arranged for the comfort of the workers. I have had considerable trouble during the year with some of these places being over-crowded with bales of rags and paper, blocking the passages leading to the exits of fire escapes and buildings, threby, endangering the safety of the workers in case of fire.

A prejudice exists against those engaged in rag sorting, indicating an aristocracy of labor, which appears unreasonable when one considers that all those who perform the work of the world are deserving of praise, regardless as to the kind of work at which they are engaged. Females seem to make the distinction as to the classification of labor more so than the men.

Fire Escapes.

In going through factories in a number of cases, I have noticed that although fire escapes have been installed, they have been rendered useless in case of fire. In one large factory two fire es apes were completely blocked, one by a table and trays piled up to the top of the window, giving access to the balcony of the fire escape, while the other one was obstructed by broken bottles and refuse from the factory. I have noticed in a number of cases that fire escapes have been allowed to become rusty for lack of paint, thereby rendering them liable to become dangerous, and in such cases I have recommended them to be given a coat of paint.

Observations.

In visiting factories, at one time everything may appear to be in keeping with the requirements, while at a later visit conditions may be reversed; and while in the former case one report may specify as to condition being satisfactory by one Inspector, in the other an adverse report may be given. The reports would seemingly conflict, while a satisfactory explanation might account for the seeming discrepancy; as for instance in some canning factories at one period of the season conditions may be perfectly satisfactory, while, when tomatoes are being canned, owing to their pulpy nature when ripe, some of the floors are scarcely fit to be walked upon, and the workers' aprons are in an uncleanly condition, which cannot be very well prevented at such time. An adverse report might then be justified, yet some allowance may be made, as the work has to be rushed, owing to the tomatoes ripening so quickly, and the companies being required to accept them as delivered. Where drainage is deficient outside surroundings are not in as good condition as might be.

In only one case, and that in Prescott, where I had been informed a laundry was carried on in connection with a shoe shop, have I been refused admittance. The proprietor told me to come back in the afternoon, as he had no time to bother with me then. I showed him my certificate, and told him I could not do that, but would not take up his time, as I could go through the premises alone. He refused to allow me to go through. I told him I was sorry he had taken that stand, as I might have to resort to extreme measures. I then went to the chief of police and reported the matter to him. He accompanied me to the place, and told the proprietor he had better allow me to go through. He again refused, stating that I could go through at four o'clock, and that he would report me for bringing the chief of police to his premises. Being undecided as to what was best to do in the matter I reported to the Department, and was instructed to go back again, and if refused admittance to prosecute at once. I returned and inspected the premises, and had no further trouble. I could only account for his refusal to allow me to inspect the premises on the ground that he must have been ashamed of the condition of the laundry at the time.

Yours respectfully,

(Sgd.) ANNIE BROWN,
Inspector of Factories.

REPORT OF MISS MARGARET CARLYLE.

To the Honorable the Minister of Agriculture:

SIR,—I have the honor to submit to you the following report of work done during the past year in the Western part of the Province, having completed the inspection of factories, workshops and mercantile establishments for the year 1908.

In reviewing the work performed since the last report, there is very little to add to the general duties that are in factory inspection.

I am pleased to be able to say that there is a marked improvement in the general conditions. Our visits are often multiplied. I have had many times to make repeated visits to the same establishments in order to get changes made that were absolutely necessary. It is believed by many that the Inspector possesses discretionary powers, and our insistence on the requirements being observed is often put down to caprice.

Trade has not been as satisfactory in many lines of manufacture as in the year 1907. There has been a scarcity of work, a number of skilled and unskilled persons being thrown out of employment. Many factories and workshops have been working on short time. Comparatively little overtime has been worked up to the last few months of the year. Many new factories have been erected, however, with the latest improvements for the health and comfort of the employees.

Ontario has not failed to hold its place in the front rank as a manufacturing centre. The sweating system in its literal sense is not extensive, although in some parts of the Province there are such shops, some large and some small; but I firmly believe that no country has its clothing manufactured under better or healthier conditions.

Sanitary.

Sanitary science may be considered under different heads. The question, however, is narrowed down by us to the consideration of the causes affecting the health of the employees within their workshops, factory, or mercantile establishments. The only essentials of life which they partake of are air and water, and the question first of all is: "Are the arrangements for the sufficient supply of pure air and water as satisfactory as they should be?" We Inspectors try to remove everything calculated to contaminate the air they breathe and the water they drink. Stale air is as unwholesome as stale water.

With regard to the sanitation of factories or establishments, as a rule, they are fairly good; some of them indeed are excellent, while in others, there is certainly room for reform. I find there is ample accommodation in most cases provided, but not always on the same floor as the one on which the persons are employed.

The chief difficulty in regard to sanitation generally is found in those buildings erected as dwelling houses and converted into factories and workshops. The difficulty in the first case is structural, in the second, the uncleanly habits of the occupants. Closet accommodation is generally provided with separate conveniences for the sexes. On the other hand, it is very common to find that in the old buildings referred to, the closets are inside the work rooms, and frequently those assigned to the two sexes lie side by side. In other cases, the conveniences referred to for women are in close proximity to a room used by men, in full view of the men. Such conditions as these are not in accordance either with the spirit or letter of the law, and on points of decency are certainly objectionable. Some of the tenement factories have been allowed to get into an unsanitary condition due mainly to a few careless tenants, whose untidy habits frustrate any attempt at improvement.

I visited a factory sometime ago, and found every wash basin and half the waterclosets blocked up with cotton waste and other articles. This is not an exceptional case. You cannot impose good sanitary conveniences upon employees any faster than they are ready to profit by them. I received a complaint from one of our large factories that girls could not use the accommodation provided for them. On visiting I found the sole objection to it was its position in the room. The objection was a correct one, with which I wholly sympathized. Every sanitary convenience for females should not communicate with any work room.

Slow progress is made with the improvement of sanitation in work shops and factories in rural districts, and little by little the various defects are being remedied. The sanitary arrangements of the smaller towns are bad in themselves, and it is nearly impossible to rectify the defects existing in factories and workshops. If any process is carried on which renders the floor liable to be wet to such an extent that the wet is capable of being removed, adequate measures must be provided for removing the same. Some complaints have been made to me as regards the supply of drinking water. I have, where possible, had the city water run into each floor.

Ventilation.

The question of what is a reasonable temperature has not given rise to any serious difficulty, and a heat of 60 degrees Fahrenheit has been maintained. In some factories and workshops, the methods of producing a sat-

isfactory temperature leave much to be desired. In some cases, a stove or two stoves keep the room warm in winter, but I sometimes wonder if they are so arranged as to give heat and not vitiate the atmosphere. The placing of these iron heaters in some of the tailor shops in the same room as the one in which the work is being done, has been the cause of much excessive heat. In some places it has been necessary to remove these stoves to an adjoining room, which I think is the most effective remedy, as has been proven.

In the investigation of a complaint recently, I found two girls in a milliner's work room, the temperature of which was only forty (40) degrees at the time. To maintain a reasonable temperature, while the measures taken to secure it must not interfere with the purity of the air, is not always an easy matter. Very little improvement can be reported on ordinary natural ventilation. Workshop windows are opened in summer and closed in winter. The increasing substitution of electric light for gas is having an excellent effect on the air conditions in work rooms.

In jewellers' workshops, the atmosphere in some places is not good, owing to gas for both lighting and soldering being used. I sometimes find the means of ventilation stopped up and on asking the reason why, they say that if the ventilator is opened a draught is created, and their work being of a sedentary nature all draughts are felt very much.

One hour at least should be allowed for dinner, and during that hour the work room should be thoroughly aired. This is necessary all the more because of the extent to which the practice prevails of, if not over-crowding, at least of keeping the room as full as the law permits. This increases the difficulty regarding ventilation.

To judge by the methods adopted in some of the new factories one would conclude that even among architects, there is an astonishing disregard for ventilation. Doors and windows in many places are the only means provided for air inlet and outlet. In too many instances, ventilation seems to be the last thing thought of.

Ventilation is a never-ending field for the attention of the Factory Inspector.

Laundries.

Laundries require much attention, as with few exceptions they are not very satisfactory. Want of heating arrangements has been noticed in some laundries in their sorting and marking rooms. Several complaints have been received regarding them.

Paper-box factories have adopted finger guards for females. They are a sort of iron and steel thimble. The girls are compelled to use them, which use I am confident will reduce the accidents.

The word "accident" in the same way as the word "danger" is used in a loose way. First comes carelessness on the part of the employed. Then comes the carelessness of the machine maker, and lastly the failure on the part of the employer to provide guards. There is little difficulty in persuading manufacturers to securely fence their machines. The great fault being that they wait to be persuaded instead of doing it before commencing operations.

Good work has been done during the year to improve the guarding of machinery and engines. One grows sick of hearing, that "Only the engineer goes there," as if he had a charmed life.

Children.

The public do not fully realize the difficulties met with in the enforcement of child labor law. They will complain that a certain factory is employing children under legal age. I do not dispute their good intentions, but to my certain knowledge many of the complaints were groundless, as we have made very searching inspections along this line.

We have found falsified certificates in some cases. It is certainly not the manufacturers always who are to blame, but oftentimes the parents. Putting a child to work when it should be at school is condemning it to ignorance for life, condemning it for the present and for the future. There are parents devoid of conscientious scruples who teach their children to falsify as to their age. Thus equipped with falsehood, they are sent into the world to seek employment. After once clearing the factory of any children under age, parents will get their children back into other factories, and then you will find by the certificate that they are over age in a few weeks' time.

An Inspector remarked some time ago that a month or two of hard labor to the parents without the option of a fine would settle the whole question.

Some employers tell us that the children are better in the factories than in the streets, but are they sure that they would be on the streets if not employed in the factory. Parents would surely send them to school. Even if a parent here and there should not realize the importance of education, are not laws made for the good of the majority.

Notwithstanding the undeniable progress that has been made in Ontario in factory legislation as regards health and safety, we have been left behind by other countries owing to the absence of regulations concerning the education of children, without which every factory law is incomplete, as a factor for the moral and intellectual elevation of work people.

In some of our own Provinces the law has been amended so that boys and girls under sixteen, employed in any industrial establishment and unable to read and write, must attend a night school in the municipality where they reside, and an employer may not receive children or young girls into his establishment without ascertaining whether such children can read or write; or, as the case may be, without a certificate from the principal in charge of the night school, showing that the child is attending the same. I am convinced that children should be admitted into the factory and workshop considering more their physical condition and degree of education than their age.

At the last session of our legislators in Ontario, we had an amendment to our Shops Act regarding the age of children which reads: "No person under twelve years of age shall be employed in any shop and no child shall be employed in any shop during the hours of holding school unless the said child shall have furnished to the employer, a certificate issued in accordance with the provisions of the Truancy Act, permitting the absence of the child from school, which certificate must be kept on file by the employer, and produced whenever called for examination by the Inspector."

Shops.

At the commencement of the year we female Inspectors were instructed to inspect all shops and places other than factories. We devoted a considerable amount of time to this part of the work, gathering information regarding hours of labor and conditions, age of children and other matters.

The small shop-keepers themselves are in favor of early closing, and would gladly have the rest it gives them if only their customers would shop within reasonable hours. There may be exceptional cases where the customers cannot do their shopping in day time, but the broad rule is otherwise. It can, and ought to be done in business hours. We find that it is not only the shopkeepers that have to be educated, but also the public. With regard to the latter, experience shows that they have no sympathy with the Act.

In some neighborhoods, years of slip-shod household management have built up a system of night trade that is difficult to reform. Here the shopkeepers and their assistants are the white slaves. Half of the long hours spent in those shops are wasted. The actual work itself might be reduced to a much shorter day. How little the public regard the hours worked by shop-keepers, the temptation they place in their way, and the withdrawal of their custom from the man who honestly tries to keep the law. There will, however, always be found a certain number of shop-keepers who are opposed to any restraint being placed by law upon the conditions under which they desire to conduct their business, and so it is that for this class that legislation and supervision will always be necessary.

Confectioners and fruit shops must have vigilant supervision in order to prevent the girls from working long hours. Where the retail shops are kept open on Saturday up to 10 p.m., there is temptation to violate the provisions of this law, by employing the females for excessive hours. These have worked in the work room all day, and then must act as sales girls at night.

Notwithstanding vigilant inspection, it must be confessed that this irregularity continues to exist to some extent.

Canning of Goods.

The canning of goods in all its details is not an attractive business, but when it is carried on in well lighted, sanitary, clean, airy, and well drained factories, provided with washing appliances, dressing rooms, hours of work regular and reasonable, many of its objectionable features would disappear. A good deal of progress in the way of improvements in the factory this year and also in the housing of their help has been noticed.

The advance, however, was not all made this year alone. It has been a task of several years, and a matter of taxing the patience of proprietors and inspectors alike, so it is pleasant to be able to report that our work is bearing fruit.

The majority of canners have gone to considerable expense in providing house accommodation for female help, fitted up very nicely with single and double bedrooms, furnished with iron beds. Dining rooms and kitchens are large and roomy, with matron in charge to keep the rooms clean and well ventilated. I am pleased to report that there are quite a number of baths provided and equipped with hot and cold water for the use of their employees.

If cleanliness should be supreme everywhere, should it not much more be necessary where food products are prepared?

New Factories.

Seeing that the requirements of a certificate from our department by new factories and workshops before beginning operation has been in force

for years, it is surprising to find that new factories and workshops are erected and work started in them without any steps being taken to ascertain whether the department is willing to grant a certificate or not.

Light.

I recently had reported to me that there existed a staircase leading to a workshop at the top of a building, which it was positively dangerous to either ascend or descend after dark, there being no light whatever on the stairway. I may add that this is not the only one. There is considerable increase in the use of electricity, and this is to be hailed as a distinct hygenic improvement, tending to cleanliness, coolness, and light. My attention has been drawn to this and deserves to be looked into. The lamps in every case should have some form of a shade in order to protect the eyes. If girls have to work at a close and trying occupation for the eyes, good light should be provided in the work rooms. The proper lighting of a work-room should be considered as carefully as the placing of safeguards on dangerous machinery or the guarding of elevator openings, or the ventilating and observance of proper sanitary conditions.

Basement workrooms are not desirable. Want of daylight, want of air, and the existence of dampness are peculiar characteristics.

The chill of the early morning, continual gas light, a stuffy, and in some cases, almost stupefying heat, in the afternoon for at least five days of the week, are always found in these basements, and the occupants may be said as never having an opportunity of enjoying the beautiful sunshine.

Spittoons.

The Inspector has power in his discretion to require the employer to provide a sufficient number of spittoons, and he must place the same in different parts of the factory where male employees are found. They are supplied in many factories, but I find a number without them. A notice should be posted up in every establishment and the staff should be educated along this line by urging them to make use of the spittoons and not to spit on the floor. Special supervision should be requisite at least for some time, but it is a necessary precaution.

The entire world is now alive to the danger of tuberculosis. The war upon it, therefore, comes within the province of the Inspector, since the object of our mission is the hygienic care of the factory.

Cubic Space.

The air space allowed is usually in excess of that required. I did not find any over-crowding. Sufficient attention is hardly paid to the cubic capacity of some workrooms caused by piles of stock and materials. This is especially the case among paper box manufacturers, clothing and underwear. The actual cubic space is thereby reduced, the admission of fresh air is impeded, also the danger of fire increased. It is a very difficult matter to deal with, as the amount of stock found to-day may be gone or doubled to-morrow.

Women's Hair.

I would again refer to the danger of young girls working amongst machinery wearing the hair loose down their back and having loose sleeves. These sleeves should be either tight or cut off at the elbow. We have had a

number of severe accidents from this cause, and a notice of warning even when posted up does not always suffice to render all danger impossible. Have not some young girls been scoffed at owing to their imprudence? Nevertheless, I still see some who will not tie up their hair, in spite of all the advice of the employers and Inspectors. On the other hand, why is it tolerated that work women let down their hair and fit it up in close proximity to machinery in motion. The answer to our remarks on this subject is always "Oh, there is no danger."

Cement Buildings.

During the last few years we have had a number of cement factories, which, in my opinion, have advantages and disadvantages. There is in all those buildings a certain amount of humidity in atmosphere in the rooms. This naturally keeps walls, floors, and ceilings damp; the result is that women and girls work all day with cold, damp feet. The floors of those buildings should be supplemented with good heavy covering, a slat or wooden top floor for workers, particularly where the employees are sitting all day. I do not consider that the basement of these buildings should be used as work-rooms. On entering the basement of buildings, I find it very damp; where cloak rooms are in the basements, the girls tell me that their clothing is damp when they put it on. This is a matter which requires consideration in constructing cement factories.

Overtime.

The overtime I consider should be done away with. The great cry is that overtime should be granted to all trades which have seasons. In nearly all the branches of industry which have seasons, during the periods between the seasons, the girls are not nearly fully employed. Overtime is responsible for some of the idleness. It fosters a spirit of discontent in those who do not get the work. I am confident that much good would result from the reduction of occasions in which overtime may be worked, also from the prohibition of it for young girls.

It is to be hoped that these overtime permits will soon disappear, because it is rather a reduction of the hours of labor for women and children, employed in factories, than an increase that is required.

Diseases of the Hands.

Inflammation of the skin of the hands in lime juice works and confectionery factories is common. I have found several girls suffering in both hands from the tip of the fingers to the elbows, in fact some of them have been unable to work. One doctor told me that this skin affection was not uncommon among girls employed in those factories and was due to their contact with sugar. He said two essential factors of eczema are a susceptible skin and the presence of an irritant, and probably in the cases above described the two factors were brought together.

In conclusion I would say that factory inspection produces more and more manifest results every year.

Yours most respectfully,

(Signed) M. Carlyle,
Inspector of Factories.

LIST OF ACCIDENTS.

LIST OF ACCIDENTS

No.	Date.	Employer.	Place.	Business.	Person injured.	Age.
1	January 1...	Williams, Greene & Rome Co.....	Berlin	Collars and cuffs..	James Gibbons.....	..
2	" 1...	Canadian Pacific Ry. Company..	London	Car shops	John Hodkinson..	47
3	" 4...	Watson Mfg. Co.....	Paris	Knitted und'wear.	..... Bird.....	..
4	" 4...	The Geo. White & Sons Co.....	London	Engines.....	Fred Mason.....	..
5	" 4...	Canadian Shredded Wheat Co....	Niagara Falls C...	Biscuits	J. C. Lymburner..	..
6	" 4...	Riordan Paper Mills..... ...	Merritton.....	Paper	Henry Hurson.....	..
7	" 4...	Massey-Harris Co.....	Toronto.....	Implements	O. Johnson.....	..
8	" 6...	Massey-Harris Co.....	Toronto.....	Implements	P. Kupnicki.....	..
9	" 7..	Canadian Foundry Co.....	Davenport.....	Foundry.	C. Day	40
10	" 7...	Riordan Paper Mills.....	Merritton.....	Paper	P. O'Brien	..
11	" 7...	Riordan Paper Mills.....	Merritton.....	Paper	Geo. Hurson.....	..
12	" 7...	A. M. Salmon	New Liskeard.....	Lumber.....	Frank Gennex....	46
13	" 9...	Sanderson-Harold Co.....	Paris	Screen doors.....	S. McLaughlin....	18
14	" 9...	Canadian Shipbuilding Co.....	Bridgeburg	Shipbuilding.....	J. J. Luthey	22
15	" 10...	R. Whitelaw.....	Woodstock.....	Engines.....	Nathaniel Abbott.	..
16	" 11...	The T. H. Taylor Co.....	Chatham	Woollens.....	Tillie Denamy....	16
17	" 13...	Kinleith Paper Co	St. Catharines	Paper	W. Tomlinson.....	..
18	" 14...	Brinton Carpet Co.....	Peterborough	Carpets	Arthur Coughlin..	..
19	" 14...	Taylor-Forbes Co.....	Guelph.....	Hardware.....	George Tisdale....	..
20	" 14...	Canadian Pacific Ry Company..	West Toronto.....	Car shops	Wm. Cranfield....	32
21	" 15...	Brinton Carpet Co.....	Peterborough	Carpets	Wm Baynton.....	..
22	" 15...	Orr & Cresswell.....	Toronto.....	Plating.....	Phillip Cooper....	22
23	" 17...	Norton Mfg. Co.....	Hamilton.....	Tin cans	Wm. Richl.....	23
24	" 20...	Canadian Pacific Ry. Company..	Bridgeburg	Shipbuilding.....	Robert Paxton....	26
25	" 20...	Goldie McCulloch Co.....	Galt	Iron founders.....	John Walton.....	22
26	" 20...	Goldie McCulloch Co.....	Galt	Iron founders.....	Charles Price.....	24
27	" 21...	Norton Mfg. Co.....	Hamilton	Tin cans.....	R. A. Best.....	19
28	" 21...	Canadian General Electric Co....	Peterborough.....	Electric workers..	O. Guerin.....	16
29	" 23...	Canadian Shipbuilding Co.....	Bridgeburg	Shipbuilding.....	Herbert Leader ..	30
30	" 23...	McClary Mfg. Co.....	London	Stoves	C. Bodfish.....	22
31	" 23...	Canadian Shipbuilding Co.....	Bridgeburg	Shipbuilding.....	Charles Davey....	29
32	" 23...	Office Specialty Co.....	Newmarket.....	Filing systems....	A. Bain.....	29
33	" 24...	Imperial Cotton Co.....	Hamilton.....	Twine and duck..	John Chadwick....	..
34	" 24...	Dominion Paper Box Co.....	Toronto.....	Paper boxes.....	Emily Beems.....	16
35	" 25...	R. J. Booth.....	Ottawa.....	Lumber.....	H. Pomminville ..	35
36	" 26...	Hamilton Steel & Iron Co.....	Hamilton..... .	Steel and iron.....	Thos. O'Rourke...	40
37	" 27...	Canadian Shipbuilding Co..... .	Bridgeburg.	Shipbuilding.....	Robert Spear.....	22
38	" 28...	The C. Turnbull Co.....	Galt	Ladies' Und'wear.	Ralph Curliss	..
39	" 29...	Canadian Shipbuilding Co.....	Toronto.....	Shipbuilding.....	Robert Paxton....	26
40	" 29...	Standard Embossing Co.....	Toronto.....	Engraving.....	Florence Clapton.	21
41	" 30...	Massey-Harris Co.....	Brantford.....	Implements	J. G. Trotman.....	21
42	" 30...	Canadian General Electric Co....	Peterborough.....	Electric works....	J. Gibson.....	21
43	" 31...	Canadian Shipbuilding Co.	Bridgeburg	Shipbuilding.....	Robert Ainsley ...	24
44	" 31...	Massey-Harris Co.....	Toronto..... ...	Implements.....	S. Smith	..
45	January 27...	Keenan Woodenware.....	Owen Sound.....	Woodenware.....	Cecil Baker.....	15
46	" 28...	Keenan Woodenware.....	Owen Sound.....	Woodenware... ..	Philip Brisen.....	40
47	February 4...	C. Wilson & Son.....	Toronto.....	Scales.....	E. Trenouth	..
48	" 4...	London Bolt and Hinge Works....	London.....	Bolts and Hinges..	Walter Guymer...	14
49	" 6...	Steelton Steel Plant.....	Steelton.....	Steel.....	George Weir	23
50	" 7...	Canadian Colored Cotton Co.....	Hamilton.....	Cotton	Rose Hyatt.....	24
51	" 8...	Riordan Paper Mills.....	Merritton.....	Paper.....	John Brown	..
52	" 8...	Massey-Harris Co.....	Brantford.....	Implements.....	James Matthews..	29
53	" 10...	Canadian Portland Cement Co....	Marlbank.....	Cement	Peter Windover...	43
54	" 11...	Massey-Harris Co.....	Toronto.....	Implements	S. A. Smyth.....	..
55	" 11...	Preston Furn. Co.....	Preston.....	Furniture.....	Arthur Hagey.....	21
56	" 12...	Massey-Harris Co.....	Toronto.....	Implements	H. Pettie.....	..
57	" 12...	Norton Mfg. Co....	Hamilton.....	Tin cans.....	Wm. Ridgeway...	37
58	" 12...	Gutta Percha and Rubber Co.....	Toronto.....	Rubber.....	Clarence Ray.....	..
59	" 13...	Hamilton Steel and Iron..... .	Hamilton.....	Steel and iron	Geo. Kerr.....	50
60	" 13...	Taylor-Forbes Co.....	Guelph.....	Hardware.....	J. Lawrence.....	..
61	" 13...	E. Leonard & Sons.....	London.....	Engines.....	T. Maitland.....	44
62	" 14...	Phillips Mfg. Co.....	Toronto.....	Mouldings.....	John Cummings...	30
63	" 15...	Firstbrook Box Co.....	Penetanguishene..	Paper boxes.....	Joseph McNamara	21
64	" 15...	McClary Mfg. Co.....	London.	Stoves.....	Mike Phelan.....	55
65	" 17...	Lake Superior Power Co.....	Sault St. Marie....	Veneer	Ernest Goddard...	22
66	" 18...	Krug Bros. & Co.....	Chesley	Furniture.....	W. Van Oneren....	.
67	" 19...	Stauntons, Limited.....	Toronto.....	Wall paper.....	Harry Freeman....	..
68	" 20...	Canadian Shipbuilding Co.....	Bridgeburg	Shipbuilding.....	Alex. Swankie ..	24
69	" 20...	Canadian Gen. Electric.....	Peterborough.....	Electric works....	E. Dillon.....	30
70	" 21...	Reid Bros & Co.....	London	Stationers.....	Wilbur Read.....	16
71	" 21...	Canadian Shipbuilding Co.....	Bridgeburg.....	Shipbuilding.....	A. Eldridge.....	23
72	" 21...	Berlin Bedding Co.....	Berlin	Mattresses.....	Julia Wismer.....	..
73	" 22..	International Harvester Co.....	Hamilton.....	Harvesters.....	W. Fisher.....	46
74	" 22...	Chesley Rake and Novelty Co....	Chesley.....	Rakes.....	Erwin Schneider...	..
75	" 24...	Canadian Coloured Cotton Co.....	Cornwall.....	Cotton.....	Robert Hurst.....	48
76	" 24...	Robert Greig Co.....	Toronto	Spices	Arthur H. Eldridge	33
77	" 25...	International Harvester Co.....	Hamilton.....	Harvesters.....	Ernest Dent.....	24
78	" 25...	Canadian Shipbuilding Co.....	Bridgeburg.....	Shipbuilding	Hugh O'Neil.....	24
79	" 25...	Canadian Shipbuilding Co...	Bridgeburg.....	Shipbuilding	Alex. Pirie.....	26
80	" 25...	Norton Mfg. Co.....	Hamilton	Tin cans	James Kielly.....	21
81	" 26...	McClary Mfg. Co....	London.....	Stoves.....	H. Perkins.....	15
82	" 27...	Rat Portage Lumber Co.....	Kenora.....	Lumber.....	Harry King.....	..
83	" 28...	James Smart Mfg. Co.....	Brockville	Hardware.....	David Glen.....	18

FOR THE YEAR 1908.

Particulars.	No.
Shoulder dislocated; cleaning flues, stepped off platform.	1
Fell into pit on top of vacuum pump.	2
* Was caught between platform and wall on elevator.	3
Part of finger taken off on wood working machine.	4
Scalp wound and bruised body; slipped and fell on sealing machine.	5
Two fingers crushed in callender rolls of paper machine.	6
Thumb split and finger injured; caught between dies of bulldozer.	7
Forefinger of right hand caught between two pieces of pig iron.	8
Left eye destroyed; a link in chain broke and sharp edge struck eye.	9
Back of thumb badly cut on barker knives.	10
Fell while carrying pulley and shaft, bruising arm and shoulder.	11
* Caught on dog of carriage and drawn on saw.	12
Right arm cut off below elbow; sleeve caught on planer.	13
Third finger bruised; while hardening up rivets chipping flew off.	14
Left hand crushed; caught in revolving plate; amputation necessary.	15
Hand burned and cut; was caught between belt and pulley.	16
End of finger crushed in paper machine roll.	17
End of finger taken off on revolving drum.	18
Foot burned by molten iron.	19
Leg and knee bruised; slipped on drop pit.	20
Scalp wound; while weaving at loom became faint and fell.	21
Hands cut; work caught on buff.	22
Tip of middle finger crushed in slot of mechanical feed.	23
Wrist bruised; air hammer canted bruising wrist.	24
Bruised by fall from scaffold.	25
Bruised by fall from scaffold.	26
Fourth finger crushed at root of nail; caught by rolls of corner groover.	27
Finger cut and nail bruised; caught between shell and beading machine.	28
Eyebrow cut and bruised; fell on a belt frame angle.	29
Second finger jammed between dies of press.	30
While drilling holes chips flew into face and eye.	31
Right hand crushed; caught and drawn in by steel rollers.	32
Back strained; while rolling bales slipped and bales rolled back.	33
Top of thumb squeezed.	34
* Log fell on him while unloading from railway cars.	35
Right foot sprained; slipped on icy ground.	36
Right knee bruised; crane swung round pinning leg against block.	37
Arm caught in gears of spinning mule and severely mangled.	38
Blow on right side with swinging crane chains.	39
Two fingers crushed; press came down on them.	40
Two fingers crushed by drop hammer; amputation necessary.	41
Thumb of left hand taken off on buzz planer.	42
Plank fell from staging on head, causing concussion of the brain.	43
First finger pinched while taking steel crank from drop hammer.	44
Three fingers lost, caught between roll feed.	45
Hand caught in rolls of planer and badly scraped	46
Index finger taken off, and second injured while testing dough divider.	47
Leg scalded, stepped into tub of hot water sunk in floor.	48
Right hand taken off while oiling sheave.	59
Two fingers crushed in rolling gears of slubbing frame.	50
Two ribs broken, fell against edge of covering on belt.	51
End of second finger crushed; mower frame dropped on it.	52
Left arm severed above elbow; caught between pulley and belt.	53
Three fingers lacerated to first joint on buzz planer.	54
Part of nail and end of finger taken off on buzz planer.	55
Left leg cut a little above knee; leg came in contact with saw.	56
Finger caught in Wheaton header and flesh torn.	57
Bones in right forearm broken; caught between roller and a bolt of duck.	58
Thumb crushed, while cutting scrap; thumb was thrown on shears.	59
Right hand scalded by steam.	60
Arm dislocated at elbow; was struck by revolving jack-box crank.	61
Palm of right hand torn; struck with piece of wood from saw.	62
Part of three fingers taken off on rip saw.	63
Foot severely burnt by molten metal.	64
Fatally scalded; stepped into an opening provided for pike-poling veneer logs.	65
Three fingers taken off at first joint on buzz-planer.	66
Two fingers bruised; hand caught in gears of machine.	67
Cut on left wrist with chisel.	68
Blood poisoning: transformer fell against leg and opened up old sore.	79
* Died from result of accident on elevator.	70
Piece of steel pierced left arm causing abscess.	71
Third finger crushed in tufting machine.	72
Severe ulceration of cornea: struck in the eye by a rivet.	73
Part of left hand taken off in cogs of embossing machine.	74
Bones of two fingers crushed fixing loom, necessitating amputation.	75
Slightly bruised; fell down hoist shaft.	76
End of right thumb cut off while working on drop hammer.	77
Fell from wooden horse and bruised side of face.	78
Lower lid of eye burnt; piece of red hot rivet steel struck him.	89
Two fingers severed below second joint; caught between dies of Crosby press.	80
Knuckle of right hand smashed; hand slipped between dies of threading machine.	81
Left hand and thumb of right hand taken off on knives of moulding machine.	82
Head and neck cut; struck by leather face of polishing wheel.	83

* Fatal.

LIST OF ACCIDENTS

No.	Date.	Employer.	Place.	Business.	Person Injured.	Age.
84	Febru'y 28...	Massey-Harris Co.	Toronto	Implements	Thos. Kelly	..
85	" 28...	Dom. Crown Cork Co.	Toronto	Corks	Maud Cowan	23
86	" 28...	Canadian General Electric Co.	Peterborough	Electric works	Maurice Crowley	28
87	" 29...	Hamilton Steel and Iron	Hamilton	Steel and iron	W. Simmons	30
88	" 29...	Toronto Silver Plate Co.	Toronto	Plating	Bert. Whitham	35
89	March 2...	Brantford Carriage Co.	Brantford	Carriages	Jos. Goodwin	..
90	" 3...	Hamilton Steel and Iron Co.	Hamilton	Steel and iron	V. Pietrangelo	36
91	" 3...	Canadian General Electric Co.	Peterborough	Electric Works	J. Hagley	20
92	" 3...	Philips Mfg. Co.	Toronto	Mouldings	Vasili Dimitroff	15
93	" 2...	McClary Mfg. Co.	London	Stoves	J. Wright	18
94	" 5...	Hamilton Steel and Iron Co.	Hamilton	Steel and iron	Ciani Osgualdo	17
95	" 5...	Polson's Iron Works	Toronto	Shipbuilding	Abrah'm Eastwood	20
96	" 5...	Hanover Specialty Co.	Hanover	Furniture	John Schiejle	..
97	" 5...	Christie Brown & Co.	Toronto	Biscuits	Lillian Jackson	21
98	" 6...	Rathbun Co.	Deseronto	Lumber	Joseph Salvansbi	28
99	" 6...	Canada Foundry Co.	Davenport	Foundry	John Bruce	35
100	" 6...	Canada Foundry Co.	Davenport	Foundry	T. Howarth	27
101	" 6...	McDonald Mfg. Co.	Toronto	Tin Boxes	Effie Staples	22
102	" 7...	Massey-Harris Co.	Toronto	Implements	Thos. Stokes	..
103	" 9...	Canada Glue Co.	Brantford	Glue	Jas. Maine	27
104	" 10...	Slingsby Mfg. Co.	Brantford	Blankets	Thos. Beales	..
105	" 10...	Clark Blanket Co.	Greenville	Blankets	Wm. Robbillard	16
106	" 10...	Staunton's, Limited	Toronto	Wall-paper	C. Hope	26
107	" 10...	Hamilton Steel and Iron Co.	Hamilton	Steel and iron	Jas. Wilson	40
108	" 10 ..	Hamilton Steel and Iron Co.	Hamilton	Steel and iron	David Fabie	35
109	" 10...	Hamilton Steel and Iron Co.	Hamilton	Steel and iron	D. Donelly	..
110	" 10...	Central Press Agency	Toronto	Engraving	Samuel Richmond	..
111	" 10...	Canada Plate & Window Glass Co.	Toronto	Glass	John Gee	..
112	" 11...	Canada Locomotive Co.	Kingston	Locomotives	Lawrence Fray	..
113	" 11...	Hamilton Steel and Iron Co.	Hamilton	Steel and iron	Sydney Bull	25
114	" 11...	John Goodison Thresher Co.	Sarnia	Machinery	Jas. Burkholder	..
115	" 11...	Hamilton Steel and Iron Co.	Hamilton	Steel and iron	Geo. Schumaker	21
116	" 12...	Canadian General Electric Co.	Peterborough	Electric Works	O. Brion	16
117	" 13...	Hamilton Steel and Iron Co.	Hamilton	Steel and iron	Maritti Guiseppe	28
118	" 13...	Pedlar Metal Roofing Co.	Oshawa	Sheet Metal	Geo. Potter	..
119	" 13...	A. Hill & Co.	Mitchell	Steel Bridge Works	Wm. Hodge	..
120	" 13...	Hamilton Steel and Iron Co.	Hamilton	Steel and iron	Frank Delvezla	26
121	" 14...	Keenan Woodenware Co.	Owen Sound	Woodenware	Ralph Hallman	33
122	" 16...	Christie Brown & Co.	Toronto	Biscuits	Arthur Goudard	24
123	" 18...	M. Langmuir Co.	Toronto	Trunks	Sydney Pemberton	20
124	" 18...	Christie Brown & Co.	Toronto	Biscuits	Kathleen Cook	14
125	" 18 ...	Massey-Harris Co.	Toronto	Implements	George Bibby	..
126	" 18...	Nathan Calder	Listowel	Sash and doors	Alfred Merton	..
127	" 18...	Massey-Harris Co.	Toronto	Implements	Wm. McCarthy	..
128	" 19...	Robertson Bros.	Toronto	Confectionery	Agnes Schofield	16
129	" 19...	Guelph Carpet Mills Co.	Guelph	Carpets	Agnes Burnett	..
130	" 20...	George Pattison & Co.	Preston	Woollens	Wm. Edgar	..
131	" 20...	J. Hungerford Smith Co.	Toronto	Soda fountains	Agnes Robinson	15
132	" 20...	Stratford Mill-Building Co.	Stratford	Engines	James Preston	..
133	" 20...	Capital Brewing Co.	Ottawa	Brewing	Henry Kuntz	..
134	" 20...	Canadian Pacific Ry. Company	West Toronto	Car shops	J. Spencer	25
135	" 21...	Staunton's, Limited	Toronto	Wall paper	Harry Crusmere	..
136	" 21...	Canadian Pacific Ry. Company	West Toronto	Car shops	Robert Heaslip	40
137	" 21...	Siemon Bros.	Wiarton	Flooring	Wm. McMaster	50
138	" 23...	Firstbrook Box Co.	Penetanguishene	Boxes	Herbert Scott	21
139	" 20 ...	International Harvester Co.	Hamilton	Harvesters	Valent Ganzlei	41
140	" 24...	Massey-Harris Co.	Toronto	Implements	S. Mary	..
141	" 24...	McKie Buggy Co.	Plattsville	Buggies	George Taylor	..
142	" 25...	United Factories, Ltd.	Toronto	Brushes	L. Karstoff	20
143	" 25...	James Smart Mfg. Co.	Brockville	Hardware	Wm. Taggart	..
144	" 26...	Canada Cycle & Motor Co.	West Toronto	Motor vehicles	John Shurttoff	..
145	" 27...	I. H. Taylor Co.	Chatham	Millers	James Kennedy	45
146	" 27...	McDonald Mfg. Co.	Toronto	Lithography	Ernie Campbell	17
147	" 30...	Canadian Colored Cotton Mills	Hamilton	Cotton	Alfred Mitchell	45
148	" 30...	Hamilton Steel and Iron Co.	Hamilton	Steel and Iron	Arthur Theobald	30
149	" 30...	Staunton's Limited	Toronto	Wall paper	Ernest Preece	14
150	" 30...	Canadian General Electric Co.	Peterborough	Electric works	R. Starr	25
151	" 30...	Chatham Bent Goods Co.	Chatham	Bent goods	Michael P. Murphy	75
152	" 30...	Don Valley Brick Works	Toronto	Brick	George Rose	30
153	April 1...	Canadian General Electric Co.	Peterborough	Electric works	H. Landry	20
154	" 2...	Toronto Paper Co.	Cornwall	Paper	Lanee McCourt	16
155	" 3...	Canadian Pacific Ry. Co.	West Toronto	Car shops	William Farr	31
156	" 4. ..	Massey-Harris Co.	Toronto	Implements	James Weadick	..
157	" 6...	Canadian General Electric Co.	Peterborough	Electric works	A H. Moore	47
158	" 6 ...	Massey-Harris Co.	Brantford	Implements	E. Sherry	26
159	" 6...	Taylor-Forbes Co.	Guelph	Hardware	H. Beasley	..
160	" 8...	Hanover Portland Cement Co.	Hanover	Cement	August Helwig	20
161	" 8...	Canada Foundry Co.	Davenport	Foundry	C. Adams	35
162	" 10...	Canada Foundry Co	Davenport	Foundry	James Sheldon	26
163	" 10...	Bell Piano and Organ Co.	Guelph	Pianos and Organs	J. W. Adams	75
164	" 10...	Cowan & Britton	Gananoque	Hinges, etc	Gertrude McIntyre	..
165	" 9...	Beardmore & Co.	Acton	Tannery	John Moffatt	..
166	" 10 ...	United Factories	Toronto	Brushes	A. Westall	22

FOR THE YEAR 1908.

Particulars	No.
Forehead cut; fell against an iron flask.	84
Second finger taken off at second joint by punch of finishing machine.	85
Left arm crushed in rolls of Callender machine, amputation necessary.	86
Left ankle sprained; walked over wall from which bridge had been removed.	87
Portion of three fingers cut off; started press before withdrawing hand.	88
Thumb and forefinger cut while operating a two-spindle shaper.	89
Face and hands badly burnt by red hot cinders.	90
Thumb cut with knife.	91
Flesh of two fingers torn.	92
Second finger split; slipped under blades of square shears while notching corners.	93
Right foot pierced by piece of scrap.	94
Palm of hand cut; hand was drawn into slotting machine.	95
Nose broken and face cut by a piece from surface planer.	96
End of fibula broken; ankle turned.	97
Foot cut by a saw; over balanced, and caught at swing saw frame.	98
While taking pipes out of flask jammed two fingers, taking nails off.	99
Eye injured by a chip which flew from a casting.	100
Point of thumb bruised and nail taken off on die of power press.	101
Stave of rumbling mill fell on him.	102
Face, hand and arm burned; coal oil lantern exploded.	103
Portion of two fingers taken off; caught in spinning mule.	104
Arm cut; caught in small gears of carding machine.	105
Calf of right leg torn; leg was drawn into gears of colour mixer.	106
Thumb crushed; finger caught between tightened links of chain in derrick.	107
Index finger cut while feeding cutting face of die.	108
Index finger taken off at second joint on wood lathe.	109
Fingers cut on circular saw.	110
While moving a light of glass cut wrist.	111
Left leg broken; casting fell on it.	112
Leg burned; while working a pile, piles flashed and burned leg.	113
Instep of left foot bruised; tool holder from lathe fell on foot.	114
Right thumb pierced while filing a handle.	115
Finger crushed and had to be amputated; caught in gears of lathe.	116
Toes badly bruised; small track buggy ran over them.	117
Four fingers crushed beneath power press; had to be amputated.	118
A piece of steel struck toe, taking nail off	119
First finger of right hand crushed; bloom from buggy fell on it.	120
Three fingers taken off; bolt of splitting saw turned.	121
Pulley fell on foot and nail had to be taken off one toe.	122
Part of three fingers taken off on buzz-planer.	123
End of toe taken off; caught between elevator and iron girder.	124
Right leg lacerated by accident on rumbling mill.	125
Thumb and part of two fingers taken off by lower tennon head knives.	126
Index finger crushed to first joint; caught between punch and piece of steel.	127
Ankle broken, toe fractured and foot bruised between hoist and wall.	128
Hand injured in filling gear.	129
Second finger of right hand crushed in gears of wool duster machine.	130
Fingers of left hand crushed on Enterprise fruit press.	131
Finger caught and injured in corrugating machine.	132
Face burned by hot pitch.	133
End of finger taken off on big end of compressor.	134
Thumb and two fingers bruised; thumb caught between roller and drum.	135
Wrist sprained; bar which holds doors closed dropped on it.	136
*Died from result of blow near stomach by board thrown from rip saw.	137
Two fingers and top of thumb taken off by rip saw.	138
Finger jammed between two loaded trucks; amputated at first joint.	139
Right foot injured while going up the hoist.	140
Four fingers of left hand severely injured on shaper.	141
While operating squaring shears had finger tips cut.	142
Left hand caught in gears of lathe and flesh lacerated.	143
While lifting a die shoe on truck it slipped and finger was caught.	144
Neck and back hurt; heavy bag fell off elevator and hit him.	145
Wrist broken; arm caught in elevator balance weight.	146
Two fingers of left hand crushed while helping to remove pulley.	147
Right eye burned by a flash from a pile.	148
Finger of right hand cut on a running conveyor.	149
Key on reel of wire broke and fell into hot compound, splashing and burning hand.	150
Legs bruised; log rolled on him.	151
Hands and face burned; steam valve burst.	152
Toe bruised; coat sleeve caught in transformer coils.	153
Index finger cut off by small knotting saw.	154
Face cut; hammer flew up and hit him.	155
Flesh between fingers torn; hand struck against guard points on cutter bar.	156
Pupil of left eye cut; while chipping steel a piece flew into eye.	157
Arm bruised between elbow and shoulder; caught in tumbler mill.	158
Foot burned by iron from ladle	159
Foot scalded by hot water from leaky steam pipe.	160
Foot crushed; while placing column in position hoist fell.	161
Arm cut; while levelling plate piece of iron fell on it.	162
Head and shoulders crushed; piano back fell on him.	163
While cleaning machine fingers were crushed and had to be amputated.	164
*Fell down hoist shaft.	165
Arm cut by stick which flew from saw.	166

*Fatal.

LIST OF ACCIDENTS

No.	Date.	Employer.	Place.	Business.	Person injured.	Age.
167	April 11	Massey-Harris Co	Toronto	Farm Implements	R. H. Reilly	..
168	" 11	D. S. Perrin & Co	London	Biscuits	John Bridge	..
169	" 11	D. S. Perrin & Co	London	Biscuits	Wm. McMullen	..
170	" 13	Hamilton Steel & Iron Co	Hamilton	Steel and iron	Wm. Smith	60
171	" 13	Taylor-Forbes Co	Guelph	Hardware	A. Stewart	..
172	" 14	Globe-Wernicke Co	Stratford	Office Furniture	H. Smith	..
173	" 16	Hamilton Steel & Iron Co	Hamilton	Steel and Iron	Charles Sayers	24
174	" 16	Phillips Mfg. Co	Toronto	Moulding	Ranford	..
175	" 16	L. McBrine Co	Berlin	Trunks	Newton Snyder	..
176	" 18	Hamilton Steel & Iron Co	Hamilton	Steel and iron	Paul Olivior	20
177	" 21	Canadian Locomotive Co	Kingston	Locomotives	Enock Godwin	..
178	" 23	Stevens, Hepner Co	Port Elgin	Brushes	Wm. Carswell	..
179	" 24	Stevens, Hepner Co	Port Elgin	Brushes	Claude Dunham	..
180	" 25	Massey-Harris Co	Brantford	Farm implements	George Kerser	32
181	" 24	Canadian General Electric Co	Peterborough	Electric works	B. McNern	14
182	" 27	Canadian Shipbuilding Co	Bridgeburg	Shipbuilding	George Senior	40
183	" 27	Canada Foundry Co	Davenport	Foundry	J. Woodham	..
184	" 27	Joseph Simpson Sons	Toronto	Underwear	Thos. Joyce	..
185	" 28	Canadian Pacific Railway Co	West Toronto	Car shops	Ern. Fitzsimmons	49
186	" 28	Hamilton Steel and Iron Co	Hamilton	Steel and iron	Franzisco Gallasee	38
187	" 29	Brinton Carpet Co	Peterborough	Carpets	Robt. Pulleybank	..
188	" 29	United Factories, Ltd	Toronto	Brushes	Philip Meter	17
189	" 29	Toronto Plate Glass Co	Toronto	Glass	F. Hollingsworth	..
190	" 30	Massey-Harris Co	Toronto	Farm implements	Wm. Conron	..
191	" 30	Massey-Harris Co	Toronto	Farm implements	M Hultman	..
192	" 30	Norton Mfg. Co	Hamilton	Tin cans	Jack McAngus	22
193	" 30	International Harvester Co	Hamilton	Agr. implements	Joseph Vandusen	15
194	May 1	Toronto Paper Mfg. Co	Cornwall	Paper	Hugh Ault	..
195	" 1	Toronto Pharmacal Co	Toronto	Drugs	Wm. Dunlop	14
196	" 2	Joseph Simpson Sons	Toronto	Underwear	Hugh Perry	..
197	" 4	McGregor-Gourlay Co	Galt	Machinery	G. H. Yarrow	..
198	" 4	Norton Mfg. Co	Hamilton	Tin cans	Jack McAngus	23
199	" 5	Bell Organ and Piano Co	Guelph	Pianos	Robert Gregson	..
200	" 5	Hamilton Steel and Iron Co	Hamilton	Steel and iron	Frank Ross	21
201	" 5	Neustadt Mfg. Co	Neustadt	Chairs	Henry Schwartz	..
202	" 6	Andrew Wilson & Co	Toronto	Cigar Co	Joseph Perelman	17
203	" 6	McClary Mfg. Co	London	Stoves	N. Kittenhofen	40
204	" 6	McClary Mfg. Co	London	Stoves	W. Holmes	24
205	" 6	Wm. Gerry	London	Contractor	Luke Jeffery	..
206	" 7	Semmens & Evel Co	Hamilton	Undertakers' Fur	Amos Skinner	..
207	" 7	Massey-Harris Co	Toronto	Farm implements	E. Pickering	.
208	" 7	John Goodison Thresher Co	Sarnia	Threshers	Keno Frederick	..
209	" 8	Toronto Pharmacal Co	Toronto	Drugs	Chas. Smith	17
210	" 9	Joseph Simpson & Sons	Toronto	Underwear	Fred. Chiplin	.
211	" 9	Stratford Chair Co	Stratford	Furniture	W. H. Scott	..
212	" 9	Collingwood Shipbuilding Co	Collingwood	Shipbuilding	Alex. Hammond	37
213	" 8	Hamilton Steel and Iron Co	Hamilton	Steel and iron	Lewis Binkley	46
214	" 11	Phillips Mfg. Co	Toronto	Mouldings, etc	James Dean	24
215	" 12	Imperial Cotton Co	Hamilton	Cotton	Annie Nickerson	..
216	" 12	Wm. Kennedy & Sons	Owen Sound	Foundry	Alex. Armour	..
217	" 13	Norton Mfg. Co	Hamilton	Tin pans	Wm. Cook	18
218	" 13	J. R. Booth	Ottawa	Lumber	Henri Bouchard	35
219	" 13	A. Hill & Co	Mitchell	Steel bridge works	Jas. Robertson	..
220	" 13	D. S. Perrin & Co	London	Biscuits	Roy Ravenscroft	..
221	" 13	Canadian Pacific Ry. Co	West Toronto	Car shops	N. Smith	..
222	" 14	Gillies Bros	Braeside	Lumber	Percy Sly	15
223	" 14	Kemp Mfg. Co	Toronto	Enameled ware	Geo. Curran	29
224	" 14	Hanover Specialty Co	Hanover	Kitchen ware	Henry Hesch	..
225	" 14	Hamilton Steel & Iron Co	Hamilton	Steel & iron	W Simons	30
226	" 14	J. S. Marshall	Dobbington	Lumber	John Graham	..
227	" 14	Toronto Electric Light Co	Toronto	Electric works	James Imrie	48
228	" 14	Frost & Wood	Smiths' Falls	Agricultural imp.	Royal Vandusen	..
229	" 15	Brinton Carpet Co	Peterborough	Carpets	Jos. Mahoney	..
230	" 15	Staunton's, Limited	Toronto	Wall paper	Arth. McKendrick	..
231	" 16	Gillies Bros. Ltd	Braeside	Lumber	Herbert Swinson	..
232	" 16	Massey-Harris Co	Toronto	Farm implements	J. Vigna	.
233	" 18	Irving Umbrella Co	"	Umbrellas	Willie Blakeley	17
234	" 19	Hamilton Steel & Iron Co	Hamilton	Steel & iron	N. Whitehead	24
235	" 19	Chalcraft & Co	Toronto	Clothing	Lawrence Plante	16
236	" 19	J. Henry Peters Co	"	Textiles	Mrs. Richardson	..
237	" 19	" "	"	"	Mrs. Bottomley	.
238	" 19	" "	"	"	Louisa Howell	..
239	" 20	Canada Cycle & Motor Co	West Toronto	Motor vehicles	A. Hopper	..
240	" 21	Staunton's Limited	Toronto	Wall paper	J. Flnegan	14
241	" 22	Guelph Spring & Axle Co	Guelph	Springs	Harry Leader	33
242	" 26	Norton Mfg. Co	Hamilton	Tin cans	Joe. Wilson	32
243	" 27	Massey-Harris Co	Toronto	Agricultural imp.	Mr. Vahay	..
244	" 27	Riordan Paper Mills	Merritton	Paper	Alfred Owen	..
245	" 28	Joseph Simpson Sons	Toronto	Underwear	Geo. Westman	..
246	" 28	Hamilton Steel and Iron Co	Hamilton	Steel and iron	Frank Denys	44
247	" 28	Canada Foundry Co	Davenport	Foundry	Wm. Tallock	30

FOR THE YEAR 1908.—*Continued.*

Particulars.	No.
Fleshy part of arm cut by lug of binder drive wheels; wheel slipped.	167
Back injured; cable on elevator slipped and elevator dropped two floors.	168
Slightly injured; elevator dropped two floors; cable slipped.	169
End of middle finger split while shearing scrap.	170
Right arm and knee burned with molten iron.	171
Index finger of left hand cut on rip saw and had to be amputated.	172
While changing guides in rolls had two fingers crushed.	173
First finger on right hand jammed while reversing gear.	174
Part of thumb taken off on saw.	175
While moving a tie from track spike ran through centre of hand.	176
Left hand injured by being caught in a jointer.	177
Small portion of index finger taken off on shaper.	178
Portion of two fingers taken off on saw.	179
First finger smashed; while trying to pry a casting, crowbar slipped.	180
Thumb of left hand cut while trying to take shell out of machine	181
Dislocation of ankle and fracture of point of fibula, also both knees injured; crane got out of control and ran off track striking mast, and he was thrown to deck.	182
Leg bruised; plate caught in skid, throwing it against his leg.	183
Hand injured on machine in wool card room.	184
While coupling engines draw bar slipped on pin and crushed two fingers.	185
Fell on sharp projecting piece of iron injuring himself.	186
Arm broken; skein of yarn on arm caught in moving part of machinery.	187
Foot wrenched; caught in elevator.	188
Leg fractured, while putting a belt from machine to driving shaft.	189
Both eyes and right arm burnt by molten iron.	190
Left eye burnt by molten iron.	191
Slipped on floor and thumb was caught by saw inflicting deep cut on tip.	192
Finger crushed at end; slipped under straightening rollers.	193
Right forearm burned; was caught between a felt and a hot dryer roll.	194
Flesh of arm torn in printing department.	195
Right hand cut while taking belt off machinery when in motion.	196
Little finger crushed on cutting-off machine.	197
Burn on left arm; arm caught between frame and spindle of cross-cut saw.	198
Fell through open trap door and broke his hip.	199
Little finger split and hand bruised, while holding steel ingot.	200
Two fingers right hand cut on buzz planer.	201
Wrist broken; hand was caught between guide on elevator and ledge.	202
While lifting a die lever slipped and die fell on hand, crushing two fingers.	203
Two fingers of right hand cut on second joint while wheeling barrow.	204
Right hand cut while operating rip saw.	205
While working a saw got a flesh wound on edge of right hand.	206
Top of left foot burned; spilt molten iron.	207
Right foot burned by molten iron.	208
While moving iron apparatus little finger got underneath and tip smashed.	209
Elevator support gave way and hand was caught, tearing it at wrist.	210
Flesh wound on right arm from chair tenoning machine.	211
Right leg broken by blow from iron angle bar.	212
First two fingers of left hand smashed between iron bar and feed roller.	213
Three fingers of left hand cut while tightening guard on sticker.	214
Eye injured; was struck by shuttle.	215
A casting fell on fingers, injuring two fingers.	216
Finger of left hand crushed between can and roll of Wheaton header.	217
* Fatal, while laying a plank over a pond fell in and was drowned.	218
Knee cap injured; struck by a piece of steel from cold set cutting.	219
Hand injured in elevator.	220
Side of face cut; while cutting a wedge of steel a small piece flew up.	221
Two fingers of right hand lacerated; caught in sprocket wheel of edger.	222
Three fingers crushed at second joint, and fourth at first joint by press.	223
Part of index finger taken off, and thumb badly cut on jointer knives.	224
Face burned and cut; while throwing water into trough to cool it; explosion occurred.	225
Two teeth knocked out and nose crushed by board from saw.	226
* While waiting for men to get some castings in position sat on engine belt; the engineer above moved piston backwards and forwards to work water out of cylinder, thereby crushing him between pulley and belt.	227
Little finger lacerated on gears of drill press; was adjusting belt.	228
While adjusting a loom it started, and flesh of right arm was torn.	229
Back cut and bruised; fell against end of shaft of small machine on floor.	230
Left hand cut on saw.	231
Tips of index and third finger crushed in gear of crane.	232
Flesh wound on right arm; sleeve caught in saw.	233
Nail torn from finger; while cutting a bolt out of a piece of wood.	234
* Fell down elevator shaft.	235
Elevator fell and a piece from drum struck shoulder fracturing it in two places.	236
Elevator hoist fell; received shock.	237
Hand injured by a piece from drum of elevator striking it.	238
Knuckles of fore finger badly lacerated; while polishing striving screws.	239
Bruised by fall from stairs leading to upper deck of machine.	240
Deep flesh wound in arm; while polishing axles sleeve caught in axle.	241
Three fingers on left hand crushed by heavy solder pot.	242
Third and fourth fingers of left hand cut on jointer.	243
Face, neck, and arms scalded by steam from digestor.	244
Flesh torn off thumb and three fingers on teeth of rag picker machine.	245
Leg fractured in two places by piece of band from falling travelling crane.	246
Bolster bar of truck came down on forefinger cutting point off.	247

*Fatal.

LIST OF ACCIDENTS

No.	Date.	Employer.	Place.	Business.	Person Injured.	Age.
248	May 29.....	Firstbrook Box Co.....	Toronto.....	Boxes.	Geo. Andrews....	22
249	" 29.....	Taylor Forbes Co., Ltd.....	Guelph.....	Hardware.....	Wm. Russell.....	..
250	" 30.....	Canadian General Electric Co....	Peterborough.....	Electric works....	N. Fitzsimmons...	26
251	" 31.....	Rainy River Lumber Co.....	Rainy River	Lumber.....	David Bell.....	45
252	" 31.....	" " "	" "	"	Wm. Quimly	35
253	June 1.....	Hamilton Steel & Iron Co	Hamilton	Steel & iron.....	Antonia Storti....	40
254	" 1.....	Rainy River Lumber Co.....	Rainy River	Lumber.....	Mike Vassue.....	..
255	" 1.....	H. Krug Furniture Co.....	Berlin.....	Furniture.....	Louis Haideman..	..
256	" 2.....	McClary Mfg. Co.....	London	Stoves.....	A. Andrews	..
257	" 3.....	Hamilton Steel & Iron Co.....	Hamilton	Steel & iron.....	J. Coughlin.....	26
258	" 3.....	Massey-Harris Co.....	Brantford.....	Implements.....	W. Gillen.....	39
259	" 5.....	Canadian Pacific Railway Co.....	West Toronto.....	Car Shops.....	Alex. Preston.....	..
260	" 4.....	Norton Mfg. Co.....	Hamilton	Tin Cans.....	Fred. Orders.....	33
261	" 4.....	Canadian Locomotive Co.....	Kingston	Car Works	George Coxworthy	..
262	" 5.....	Standard Woollen Mills Co.....	Toronto.....	Woollens.....	Sarah Broadbent..	21
263	" 5.....	Canadian General Electric Co	Peterborough	Electric Works....	W. H. Roddy.....	22
264	" 5.....	Riordan Paper Co.....	Merritton	Paper.....	J. A. Brown.....	..
265	" 6.....	Hamilton Steel & Iron Co.....	Hamilton	Steel & Iron.....	Ernest Slyford....	40
266	" 7.....	Standard Woollen Mills Co.....	Toronto.....	Woollens	John Campbell ...	45
267	" 8.....	Western Ont. Portland Cement Co.	Altwood	Cement.....	S. May.....	..
268	" 8.....	Gillies Bros., Ltd	Braeside	Lumber.....	John Goodwyn....	..
269	" 9.....	Columbia Handle & Lumber Co..	London.....	"	Charles Brimmond	..
270	" 9.....	John B. Smith & Sons.....	Callender	"	Louis Denault....	44
271	" 10.....	Forbes, R. Co., Ltd.....	Hespeler	Woollen Goods....	Yens From	59
272	" 10.....	Canada Foundry Co.....	Davenport	Foundry	Fred Crouch.....	35
273	" 10.....	Wolverine Cedar & Lumber.....	Little Current.....	Lumber.....	John Dunn	..
274	" 10.....	John McNee & Sons.....	London.....	Cigars	Hanna Pollick....	..
275	" 11.....	Norton Mfg. Co.....	Hamilton.....	Tin Cans.....	E. Read	25
276	" 13	Carney Lumber Co.....	Owen Sound.....	Lumber.....	Joseph Belcota....	..
277	" 15.....	Hamilton Steel & Iron Co.....	Hamilton.....	Steel & Iron.....	A. Riley	30
278	" 16.....	McClary Mfg., Co.....	London.....	Stoves.....	John King.....	21
279	" 17.....	Canadian Iron & Foundry Co.....	St. Thomas.....	Castings.....	L. Tompkins.....	37
280	" 17.....	Massey-Harris Co.....	Brantford.....	Implements... ...	Jas. Wallace.....	20
281	" 17.....	Canadian Iron & Foundry Co.....	St. Thomas.....	Castings.....	Arthur Pilgrim....	32
282	" 19.....	Canada Foundry Co.....	Davenport.....	Foundry	E. Miller.....	19
283	" 19.....	International Harvester Co.....	Hamilton	Harvesters.....	Burton Birks	30
284	" 20.....	Canadian Carriage Co.....	Brockville	Carriage	Wm. J. Ewing....	..
285	" 22.....	Kerr Engine Co.....	Walkerville.....	Engines	Alexander Pratt..	..
286	" 22.....	Collingwood Shipbuilding Co.....	Collingwood	Shipbuildiog.....	Robert Hutchinson	45
287	" 22.....	Macdonald Mfg. Co.....	Toronto.....	Tin Litbographers	Wilfred Beams....	17
288	" 23.....	International Harvester Co.....	Hamilton	Harvesters.....	George Aull.....	28
289	" 24.....	Goldie & McCulloch Co.....	Galt.....	Ironfounders.....	James Vogal.....	20
290	" 24.....	James Smart Co.....	Brockville	.....	John Pask.....	30
291	" 25.....	Collingwood Shipbuilding Co....	Collingwood	Shipbuilding.....	Wm. Boyle.....	35
292	" 25	E. Leonard & Sons...	London	Engines.....	B. Jenkins.....	..
293	" 26.....	Lincoln Paper Mills.....	Merritton.....	Paper.....	Darby Dougherty.	..
294	" 25.....	Massey-Harris Co.....	Toronto.....	Implements.....	J. Chippendale ...	..
295	" 27.....	Canadian General Electric Co....	Peterborough.....	Electric works....	E. Ford.....	22
296	" 27.....	Norton Mfg. Co.....	Hamilton	Tin cans.....	George Reihl.....	26
297	" 29.....	E. Leonard & Sons.....	London.....	Engines.....	H. Baker.....	..
298	" 29.....	E. Leonard & Sons.....	London.....	Engines.....	W. Brooks	..
299	July 3.....	Canadian General Electric Co ...	Peterborough.....	Electric works....	J. G. Brown	50
300	" 4.....	Auburn Woollen Co.....	Peterborough.....	Woollens.....	Wm. McKnight...	..
301	" 5.....	Hamilton Steel and Iron Co.....	Hamilton.....	Steel and Iron....	Michael Fleis.....	35
302	" 9.....	J. Hungerford Smith Co..	Toronto.....	Soda foun. requis's	Eva Rimberg.....	20
303	" 11.....	Gillies Bros.....	Braeside	Lumber.....	James May.....	23
304	" 11.....	B. Greening Wire Co.	Hamilton.....	Wire rope.....	Irving Blythe	27
305	" 14.....	C. A. Foster.....	Haileybury	Lumber.....	Theodr. Schmeley	40
306	" 14.....	Lueli's Planing Mill.....	Thessalon.....	Planing mill.....	Jos. Morgan.....	..
307	" 17.....	Canadian General Electric Co....	Peterborough.....	Electric works....	C. Clemmence	52
308	" 20.....	International Harvester Co.....	Hamilton.....	Harvesters.....	John Parat.....	36
309	" 21.....	Graham Nail Works.....	Toronto.....	Wire nails.....	John Smith	..
310	" 20.....	International Harvester Co.....	Hamilton.....	Harvesters.....	Wm Smith	..
311	" 22.....	Standard Ideal Co.....	Port Hope	Enameling works	J. Halliday.....	40
312	" 22.....	Standard Ideal Co.....	Port Hope	Enameling works.	H. Mills	30
313	" 22.....	International Harvester Co.....	Hamilton.....	Harvesters	Fred. Crowe.....	32
314	" 22.....	Hamilton Steel and Iron Co.....	Hamilton.....	Steel and Iron....	Petro Justals.....	17
315	" 23.....	Massey-Harris Co.....	Toronto.....	Implements.....	John Hardy	..
316	" 23.....	Northern Construction Co.....	Kashalaine.....	Railroad contr'c'rs	Pawlo Mamcrar ..	..
317	" 23.....	Massey-Harris Co.....	Toronto.....	Implements.....	C Richmond.....	..
318	" 20.....	Dundas Cotton Mill.....	Cornwall...	Cottons	Sylvester Cormier.	76
319	" 20.....	Cowan & Britton	Gananoque.....	Foundry.....	Mr. Murchie.....	..
320	" 21.....	Hamilton Steel and Iron Co.....	Hamilton.....	Steel and Iron....	H. Calasandi.....	30
321	" 27.....	Norton Mfg. Co.....	Hamilton.....	Tin cans.....	Wm. Pace.....	23
322	" 27.....	Hamilton Steel and Iron Co.....	Hamilton..... ...	Steel and Iron....	M. Dignan.....	32
323	" 28.....	Hamilton Steel and Iron Co.....	Hamilton.....	Steel and Iron....	James McCan.....	35
324	" 28.....	Victoria Wheel Works.....	Galt..... ...	Wheels.....	A. Clement	20

FOR THE YEAR 1908.

Particulars.	No.
* While trying to adjust belt on main shaft pulley it became fast on shaft, causing collapse of small connecting shaft which injured him to such an extent that he died.	248
Nail was torn off one finger; caught in power punching press,	249
Right arm caught in gears of machine and cut from elbow down.	250
Severely scalded by breaking of a blow-off pipe.	251
* Died. Severely scalded by breaking of blow-off pipe under battery of boiler.	252
Finger crushed between hook on electric crane and iron fork.	253
Knee lacerated; fell on conveyor chain in sawmill.	254
Forefinger taken off at first joint and three other fingers at last joint on buzz planer.	255
Forefinger taken off at root of nail on stamping press.	256
Scalp wound; chain fastening of overhead crane broke, hitting him on the head.	257
Sledge hammer struck a joist above him and then hit his head.	258
Back of hand cut, clips which hold nozzle on test hose flew off and struck hand.	259
Finger burst open and nail torn, caught between sprocket chain and gear.	260
Bone of leg broken and flesh torn between "dog" of planer and edge of housing; had to be amputated.	261
Bone of right hand broken and hand lacerated; caught in loom.	262
Stepped on nail on board and nail ran into centre of foot.	263
While tying pulp up in bundles, a pile fell on him injuring leg and ribs.	264
Shoulder struck by side of chute and strained.	265
Right leg fractured, stumbled into hole in floor.	266
*While putting away a rope used for putting on belts it came in contact with shaft, and as the other part was around his wrist he was drawn round the shaft. Died from injuries received.	267
Back of hand cut on lath saw.	268
Two fingers cut on saw.	269
*While using axe to take a piece off board, it caught on pulley and handle was driven into his bowels, bursting main artery and causing instant death.	270
Thigh bruised and muscles partially paralyzed; while oiling shafting fell from ladder.	271
Fingers of right hand smashed in bull dozer.	272
Hand lacerated and bone broken; piece of edging flying back from bolter.	273
Slightly injured on elevator.	274
Hand slipped on grindstone while sharpening chisel.	275
*Was caught between rollers of slab slasher and so badly crushed in legs and stomach that he died.	276
Fell on moulds and injured head.	277
Thumb badly crushed in stamping press.	278
Lost sight of one eye; elevator dropped.	279
Left eye cut by small chip which flew from cutting tool of terret lathe.	280
Face cut, knee and foot bruised; elevator slipped.	281
Arm broken and cut; caught between "dog" of planer and reverse lever bracket.	282
Portion of three fingers taken off on jointing machine.	283
Thumb taken off in circular saw.	284
Forearm pierced by a tool while working on lathe.	285
Large toe crushed above first joint and had to be taken off; steel plate fell on it.	286
Second finger bruised and tip of index finger taken off by punching die.	287
Right leg fractured; slipped on roof of forge and fell to the ground.	288
Bone of finger splintered; caught in stripper on punch.	289
Badly burned; fell with ladle of molten metal.	290
Struck on jaw with lever and head injured.	291
Tips of three fingers smashed between roller and iron base of engine.	262
*Overcome by weakness, fell in a pool of water face downwards and was suffocated.	293
Right foot burned by molten iron.	294
Right ankle skinned and bruised; foot slipped into pulley.	295
Second finger of right hand taken off at root of nail on dies of single press.	296
*Killed by explosion of piston head; supposed that some liquid percolated through metal and when heated generated steam.	297
Lip and forehead cut and elbow bruised by explosion of piston head.	298
Top of third finger of left hand crushed; pulled clay press chamber off and railing fell on to fingers.	299
Slipped and fell across a loom.	300
End of finger taken off; caught in apron at end of chute.	301
Finger bruised on cherry pitting machine.	302
Fell and hand came in contact with saw, cutting it badly.	303
Right hip injured; started elevator the wrong way and was caught under right arm by floor of elevator, which lifted him off his feet and he fell to bottom of shaft.	304
Leg cut with slash saw.	305
Lost one finger on left hand; run hand into edger.	306
Second finger of left hand torn off to first joint; caught between driving pin and clamp on lathe.	307
Severely sprained and contused left foot; piece of pig iron fell on it.	308
Fell from ladder, spraining his ankle.	309
Punch from cross head of press fell on finger, severely bruising and lacerating same.	310
Leg struck by flask and bruised	311
First finger and thumb taken off on circular saw	312
While undecking binder frames and knotters had tongue severely lacerated.	313
Toe bruised while helping to move pipe.	314
Index finger of left hand struck with heavy hammer.	315
*While working at slush table got up to clear slabs away from the saws, and was almost cut in two.	316
Back of left hand and index finger lacerated while punching sheet steel.	317
Right thumb and index finger had to be amputated; caught in cylinder.	318
Arm broken, being caught in revolving shaft.	319
Thumb of right hand smashed while shearing pipe at upright shears; amputated	320
Finger crushed and nail torn off; caught in steel rolls while rolling body blanks.	321
Angle bars fell on left foot, bruising instep, and large toenail partly separated.	322
First finger of right hand smashed; stuck finger in gear.	323
Fell off elevator platform and broke thigh.	324

*Fatal.

LIST OF ACCIDENTS

No.	Date.	Employer	Place.	Business.	Person injured.	Age.
325	July 28	Massey-Harris Co	Toronto	Implements.	P. Smith	..
326	" 28	Victoria Wheel Works	Galt	Wheels	Wm. Gilchrist	..
327	" 29	Hamilton Steel and Iron Co	Hamilton	Steel and Iron	Fred. Easter	..
328	" 30	Norton Mfg. Co	Hamilton	Tin cans	John Kielly	22
329	" 30	Hamilton Steel and Iron Co	Hamilton	Steel and Iron	Levi Baker	..
330	" 30	Canada Cycle and Motor Co	West Toronto	Motor vehicles	F. W. Linforth	..
331	" 30	Norman Playfair	Midland	Lumber	W. Hoag	..
332	" 30	Hibbard & Eccleston	St. Thomas	Laundry	May Kinsman	21
333	" 17	Dodge Mfg. Co	Toronto	Engines	Alfred Mortlock	..
334	" 31	Collingwood Shipbuilding Co	Collingwood	Shipbuilding	A. Lovering	18
335	" 31	Collingwood Shipbuilding Co	Collingwood	"	David Hogg	27
336	Aug. 1	Firstbrook Box Co	Toronto	Boxes	James Galbraith	26
337	" 2	Hamilton Steel & Iron Co	Hamilton	Steel & Iron	R. Spall	27
338	" 4	Christie Brown & Co	Toronto	Biscuits	Elsie Haseltine	14
339	" 5	Massey-Harris Co	"	Implements	J. Berwick	..
340	" 6	Chesley Furniture Co	Chesley	Furniture	T. Robinson	..
341	" 7	Canadian General Electric Co	Peterborough	Electric Works	H. Ganghroger	28
342	" 7	Stauntons Limited	Toronto	Wall paper	Wm Hubbard	17
343	" 7	McClary Mfg. Co	London	Stoves	Chas. Russell	21
344	" 7	" " "	"	"	Edward McBride	45
345	" 7	" " "	"	"	Emerson Healy	21
346	" 10	Toronto-Waterloo Office Fixture	Waterloo	Office Furniture	J. Salam	26
347	" 11	Gillies Bros	Braeside	Lumber	Arthur Leckey	16
348	" 11	Little Current Lumber Co	Little Current	"	J. Hyde	..
349	" 11	Collingwood Shipbuilding Co	Collingwood	Shipbuilding	Dan McLeod	17
350	" 12	Taylor-Forbes Co	Guelph	Hardware	Peter Lucian	..
351	" 12	Norton Mfg. Co	Hamilton	Tin cans	W. McKenzie	39
352	" 14	Massey-Harris Co	Toronto	Implements	W. Foster	..
353	" 14	W. C. Charters	East Toronto	Planing Mill	Ernest Mosher	..
354	" 14	Hamilton Steel & Iron Co	Hamilton	Steel & Iron	J. Pape	47
355	" 17	John Campbell & Son	London	Carriages	David Lindsay	..
356	" 18	Macgregor Gourlay & Co	Galt	Machinery	Bert Hiekey	..
357	" 18	John Campbell & Son	London	Carriages	John Schussler	..
358	" 20	Hanover Portland Cement Co	Hanover	Cement	Christian Weis	..
359	" 21	Hamilton Steel & Iron Co	Hamilton	Steel & Iron	Garvin Nichols	26
360	" 22	" " "	"	"	Joe Race	27
361	" 24	Rolph & Clark	Toronto	Lithographers	Ethel Wilson	16
362	" 24	McClary Mfg. Co	London	Stoves,	Robert Graham	20
363	" 25	Bain Wagon Co	Woodstock	Wagons	Thomas Haig	35
364	" 26	Love Bros. Ltd	Toronto	Building supplies.	Robert McGill	34
365	" 28	Galt Robe Co	Galt	Robes, etc	M. Shortreed	..
366	" 28	Stauntons, Limited	Toronto	Wall paper	Henry Bunce	14
367	" 27	Fort Francis Lumber Co	Fort Francis	Lumber	Clifford Merchie	25
368	" 29	B. Greening Wire Co	Hamilton	Wire Rope	Wm. Nicholson	32
369	" 29	Canadian General Electric Co	Peterboro	Electric Works	Robert Buntin	52
370	" 30	Hamilton Steel and Iron Co	Hamilton	Steel and iron	T. Younger	44
371	" 31	" " "	"	"	Robert Connelly	26
372	" 31	" " "	"	"	J. Beveridge	38
373	" 31	" " "	"	"	Chas. Whitefield	35
374	" 31	" " "	"	"	Joseph Samtara	40
375	" 31	" " "	"	"	F. Volterman	45
376	" 31	" " "	"	"	G. Rosenburg	28
377	Sept. 1	Goderich Organ Co	Goderich	Organs	James Denomey	..
378	" 1	International Harvester Co	Hamilton	Harvesters	Alex. Aitcheson	26
379	" 4	Hamilton Steel & Iron Co	"	Steel and iron	W. Johnson	27
380	" 8	" " "	"	"	Angelo No. 174	23
381	" 10	Taylor-Forbes Co	Guelph	Hardware	George Bard	..
382	" 10	Collingwood Shipbuilding Co	Collingwood	Shipbuilding	Archibald Milligan	22
383	" 11	Hanover Speciality Co	Hanover	Kitchen Cabinets.	John Schiefle.	.
384	" 11	Hamilton Steel and Iron Co	Hamilton	Steel and iron	Levi Baker	45
385	" 11	Canadian General Electric Co	Peterboro	Electric Works	M. Sharpe	22
386	" 10	Dunlop Tire and Rubber Co	Toronto	Rubber goods	J. Townsend	..
387	" 14	Collingwood Shipbuilding Co	Collingood	Shipbuilding	Thomas Forsythe	37
388	" 14	Canadian General Electric Co	Peterboro	Electric Works	F. Panter	30
389	" 14	International Harvester Co	Hamilton	Harvesters	Pete Bozoian	38
390	" 15	Hamilton Steel and Iron Co	Hamilton	Steel and iron	Pasqual Mortate	42
391	" 16	Ontario Malleable Iron Co	Oshawa	Iron	Oliver Pointer	..
392	" 16	Toronto-Waterloo Office Fixture Co	Waterloo	Office fixture	John Dechert	15
393	" 16	McKinnon Dash & Metal Co	St. Catharines	Carriage hardware	Orman Snider	19
394	" 17	Massey-Harris Co	Toronto	Farm implements.	G. M Black	..
395	" 17	Pugsley Derigman & Co	West Toronto	Soap	Joshua Wedgewood	44
396	" 21	D. S. Perrin & Co	London	Biscuits	James Cluff	.
397	" 22	Firstbrook Box Co	Toronto	Paper boxes	Tassie Clifton	16
398	" 22	Stratford Mill Building Co	Stratford	Mill Machinery	Geo. Campbell	..
399	" 22	Canadian Iron and Foundry Co	Fort William	Foundry	Nykober Kowpock	29
400	" 24	Brantford Carriage Co	Brantford	Carriages	Richard Lang	..
401	" 26	Canadian General Electric Co	Peterboro	Electric	C. J. Hicks	38
402	" 26	Dyment Mickle Lumber Co	Whitney	Lumber	J. Klepper	..
403	" 26	Jas. Smart Mfg. Co	Brockville	Stoves	Arthur Arnold	36

FOR THE YEAR 1908.

Particulars.	No.
Fleshy part of right forearm cut on planer knife.	325
Fell off a wagon and broke his shoulder.	326
*Was thrown over top of stack into which a block was hooked, by which he was raised and lowered at the end of a rope; the hook slipped from place and he plunged to the bottom and was killed.	327
Tip of thumb crushed: finger caught between dies of gang press.	328
Wrist cut while shearing scrap.	329
While cleaning window the glass broke, lacerating hand badly.	330
*Was caught between end of log carriage and bunter, and leg was badly crushed, which resulted in his death.	331
Hand caught in mangle, and she lost four fingers.	332
Tried to re-set drill in chuck without stopping machine and was drawn in.	333
While cutting steel discs tool dug into centre of shaft and cutting flew up, striking and injuring eye.	334
While riveting, chip flew off and struck him in the eye.	335
Top of fourth finger severed below nail, and other fingers cut on rip saw.	336
Foot badly bruised; mould centre fell on it.	337
Tendon of index finger severed, while cutting biscuits.	338
Right foot injured by molten iron.	339
Part of three fingers of left hand cut off on buzz planer.	340
Top finger on right hand off at first joint: attempted to knock steel clip off cutter while machine was in motion.	341
Arm injured; hand caught between belt and pulley.	342
Foot burned by molten metal.	343
" " "	344
" " "	345
Scalp wounded; cross piece of door fell while moving frame.	346
While piling lumber foot caught in small carrier, and one leg was broken.	347
Leg cut by cant hook; log rolled against cant hook driving same into leg.	348
Arm fractured, left foot and nose injured, and, general shaking up; while making blue prints at top story of office electric wire he was leaning on gave way:	349
Struck by lightning.	350
Hand cut on load of tin plate.	351
Piece of timber fell on foot injuriog instep.	352
Two fingers injured in re-saw.	353
Little finger cut in gear wheel of upright drill while shoving in a clutch.	354
Shoulder injured on elevator; pulled wrong cable, got excited and jumped off.	355
Part of finger taken off on lathe.	356
Struck on head by piece of wood which flew from shaper.	357
Burned about face and hands while throwing waste into fire under boiler.	358
While carrying ingots to the furnace slipped, and ingots fell on foot.	359
Hand badly bruised; jammed against housing while holding bar.	360
Two fingers crushed in cog wheel and had to be amputated.	361
Foot burned by molten metal.	362
Loss of little finger; finger came into contact with jointer knives.	363
Little finger on left hand fractured while working jointer.	364
Fingers squeezed between rolls of mangle.	365
Small scalp wound; walked into machine with head down.	366
Fell on cutting saw and injured arm so badly that it had to be amputated.	367
While elevating shaft, fell from platform and cut tendons of right hand	368
Hand and arm badly burned; end of file touched a switch and he received a shock.	369
Foot crushed and toe broken; valve casting fell from boiler and struck foot.	370
Face and body burned; plate in side of moulding flask gave way and molten metal poured out.	371
Face and arms burned by molten metal.	372
Face and arms burned by molten metal.	373
Badly burned by molten metal.	374
Face and arms burned by molten metal.	375
While making up group of moulds one slipped on foot bruising it.	376
Thumb cut by splinter while operating rip saw.	377
Slight concussion; belt clip caught top of head.	378
While at work piling some dirt lodged in eye causiog inflammation.	379
Finger nail torn off; steel bar dropped on finger.	380
Struck on side by tongue of wagon.	381
Back injured; while calking staging gave way and plank struck him.	382
Hand came into contact with jointer knives and half of first joint on two fingers severed.	383
Legs burned; slipped in road of telegraph and was hit by a hot box pile.	384
While changing "dog" on planer had hand smashed; two fingers amputated.	385
Two fingers on left hand crushed to first joint; placed hand on end gate of lorry as driver started causing belt to roll back and strike fingers.	386
Rib broken; fell to the ground off a plank.	387
Foot and ankle bruised; rope broke while lifting bearing bracket.	388
Incised wound and fracture of skull; struck on top of head with air hoist..	389
Shoulder bruised; barrow of cinders was dumped on him.	390
* Killed by bursting of emery wheel	391
Fleshy part of thumb on inside of palm cut on sanding machine.	392
Severe bruise on abdomen, face scratched and hand cut while grinding dies wheel broke and die struck him.	393
Second finger of right hand lacerated and nail off, by cut of saw.	394
Face, eyes and arms burned, by blowing out of steam valve's centre.	395
Hand caught in dough break and slightly crushed.	396
Second finger caught in rolls of groover and bruised to below second joint.	397
While rolling fly wheel of engine along floor it struck a chip which threw it sideways breaking one finger and knocking out tooth.	398
Leg broken and foot crushed; car wheel fell on leg.	399
Second finger cut on band saw.	400
Second finger taken off at first joint; cylinder head of air hoist fell on finger.	401
Thumb and finger cut, wrench slipped while tightening a nut on shingle machine,	402
Two ribs broken; corundum wheel burst.	403

* Fatal.

LIST OF ACCIDENTS

No.	Date.	Employer.	Place.	Business.	Person injured.	Age.
404	Sept. 26	Rathbun Co	Deseronto	Sash and door	Mark McGivern	48
405	" 28	McClary Mfg Co	London	Stoves	Wm. Schofield	18
406	" 28	Hamilton Steel and Iron Co	Hamilton	Steel and iron	Pietro Coutle	22
407	" 29	Wickett & Craig	Toronto	Fancy leather	Thos. J. Plummer	60
408	" 29	Christie Brown & Co	Toronto	Biscuits	Frederick Gower	28
409	Oct. 2	Thomas Bros	St. Thomas	Brooms	Isiah Hibbard	56
410	" 2	Canada Iron and Foundry Co	Fort William	Foundry	J. Antonia	46
411	" 2	Canadian Locomotive Co	Kingston	Engines	John Linton	
412	" 2	John Bertram & Sons Co	Dundas	Machine Tools	Jas. Lang	
413	" 3	Massey-Harris Co	Toronto	Implements	A. Prout	29
414	" 6	London Bolt and Hinge Works	London	Bolts, etc.	Edward Gourley	
415	" 9	Hamilton Steel and Iron Co	Hamilton	Steel and iron	J. Cummings	
416	" 9	Massey-Harris Co	Toronto	Implements	John Middlemiss	25
417	" 6	Canada Cycle and Motor Co	West Toronto	Motor Vehicles	W. Pow	
418	" 10	Eddy Bros. & Co	Blind River	Lumber	Felix Maloin	16
419	" 8	Thomas Lawson & Sons	Ottawa	Machinery	Chas. Bellsboro	
420	" 12	Canadian Colored Cotton Co	Cornwall	Cottons	Louis Quesnelle	18
421	" 12	United Factories	Toronto	Brushes, etc	Geo. Saunders	
422	" 10	Hamilton Steel and Iron Co	Hamilton	Steel and iron	H. Dane	48
423	" 10	International Harvester Co	Hamilton	Harvest machin'ry	Harry P. Martin	19
424	" 1	International Harvester Co	Hamilton	Harvest machin'ry	M. J. Pirie	32
425	" 12	McDonald Mfg. Co	Toronto	Lithographers	B. Beames	20
426	" 15	Strathroy Furniture Co	Strathroy	Furniture	Alex. Johnston	
427	" 16	Norton Mfg. Co	Hamilton	Tin cans	D. Ougley	23
428	" 16	Brantford Stareh Co	Brantford	Starch	Wm. Callis	
429	" 16	International Harvester Co	Hamilton	Machinery	Hubt.Wolstenholm	36
430	" 17	Hamilton Steel and Iron Co	Hamilton	Foundry	Thos. Cheeseman	20
431	" 19	Harris Abattoir Co	Toronto	Meat Packers	Tonas Creas	35
432	" 19	Harris Abattoir Co	Toronto	Meat Packers	David Bottle	40
433	" 19	Harris Abattoir Co	Toronto	Meat Packers	Chas. Taylor	24
434	" 19	Harris Abattoir Co	Toronto	Meat Packers	W. R. Tyler	38
435	" 19	Christie Brown & Co	Toronto	Biscuits	Thos. Dicks	55
436	" 20	Electro Metal, Limited	Welland	Metals	Costanzo Arnedo	31
437	" 21	Canadian General Electric Co	Peterborough	Electric machin'ry	C. Stewart	20
438	" 21	Canadian General Electric Co	Peterborough	Electric machin'ry	R. Northcott	46
439	" 28	Collingwood Shipbuilding Co	Collingwood	Shipbuilding	Edward Bonsfield	26
440	" 28	Bird Woollen Mill Co	Braebridge	Woollen Mills	Robert Brooks	15
441	" 28	Belleville Portland Cement Co	Belleville	Cement	Harry Burton	24
442	" 30	International Harvester Co	Hamilton	Foundry	Charles Earon	26
443	" 30	Telfer Mfg. Co	Toronto	Paper Boxes	Nellie Glass	20
444	" 31	Hunter-Rose Co	Toronto	Printers	Sophie Graham	
445	" 31	John Goodison Thresher Co	Sarnia	Threshers	Peter A. Currie	
446	" 31	Cameron & Campbell	Toronto	Woodworking	Geo. W Gimlett	34
447	" 31	Grand Trunk Railway Co	Toronto	Repair shops	F. W. Ramsey	29
448	Nov. 2	Canadian Locomotive Co	Kingston	Locomotives	James Joyner	
449	" 3	Massey-Harris Co	Toronto	Implements	Alex. Kirkland	75
450	" 3	McGregor-Gourlay Co	Galt	Machinery	F. Lee	
451	" 2	International Harvester Co	Hamilton	Harvest machin'ry	M. Merhan	32
452	" 2	H. J. Hall & Son	Berlin	Planing mill	Henry Otterbein	35
453	" 6	Massey-Harris Co	Toronto	Implements	S. Mackay	25
454	" 6	Massey-Harris Co	Brantford	Implements	Archibald Green	40
455	" 6	Chaplin Wheel Co	Chatham	Wheels, etc	John Gerber	42
456	" 6	Thomas Bros	St. Thomas	Brooms, etc	Geo. Harrison	40
457	" 10	Little Current Lumber Co	Little Current	Lumber	Omer Rheume	
458	" 11	Massey-Harris Co	Toronto	Implements	R. Penrose	45
459	" 12	S. H. Hancock	Toronto	Sash and doors	Fred. Surman	
460	" 13	H. A. Clemens Co	Guelph	Lumber	Geo. Billings	
461	" 17	Massey-Harris Co	Toronto	Implements	D. McDonald	40
462	" 18	Berlin Racycle Co	Berlin	Bicycles, etc	Albin Johannes	
463	" 18	Massey-Harris Co	Brantford	Implements	Moses McCormack	30
464	" 18	Hamilton Steel & Iron Co	Hamilton	Foundry	S. Fleck	35
465	" 19	John Bertram & Sons Co	Dundas	Machine tools	Arthur Smith	30
466	" 21	Canada Cycle and Motor Co	Toronto Junction	Motor vehicles	P. Rhodes	
467	" 21	Dominion Pressed Steel Co	Port Elgin	Shovels, etc	Edward Williams	40
468	" 22	Hamilton Steel & Iron Co	Hamilton	Foundry	G. Hampson	22
469	" 24	W. A. Kirbs	Hespeler	Lumber	Edward Schaefer	
470	" 26	Dominion Belting Co	Hamilton	Belting, etc	B. Murphy	
471	" 26	Norton Mfg. Co	Hamilton	Tin cans	W. Robinson	40
472	" 26	Collingwood Shipbuilding Co	Collingwood	Shipbuilding	R. Eschuck	34
473	" 27	Ontario Lantern & Lamp Co	Hamilton	Lanterns, etc	G. McKenzie	
474	" 27	W. A. Kribs	Hespeler	Lumber, etc	Frank Murphy	
475	" 28	James Smart Mfg. Co	Brockville	Hardware	W. Tomlinson	32
476	" 30	Beardmore & Co	Aeton	Tannery	John Barr	
477	" 27	Nicholson File Co	Port Hope	Files, etc	Roy Trenbeth	17
478	" 30	Massey-Harris Co	Toronto	Implements	C. Robinson	15
479	" 30	Canadian Colored Cotton Mills Co	Cornwall	Cottons	H. Czorny	42
480	Dec. 1	McKinnon Dash & Metal Wks. Co	St. Catharines	Metals, etc	Frank Mahony	20
481	" 1	Massey-Harris Co	Toronto	Implements	T. Mitchell	24
482	" 3	Sherlock-Manning Co	London	Organs, etc	Wm. Kermath	35
483	" 3	Telfer Bros., Limited	Collingwood	Biscuits, etc	Roy Carmichael	18
484	" 4	Canadian Westinghouse Co	Hamilton	Machinery	J. Stevenson	
485	" 4	Canada Foundry Co	Davenport	Foundry	John Styles	17
486	" 5	Canadian Locomotive Co	Kingston	Locomotives	Vernon Knowles	

FOR THE YEAR 1908.

Particulars	No.
Index finger gashed and part of two other fingers taken off on a saw.	403
Thumb crushed; caught by driving crank of power hack saw.	404
Left hand cut and leg bruised; while unloading car of scrap a piece of steel fell.	405
*Fell on his head from hoist; died within two hours.	406
Index finger taken off at first joint and second finger crushed; hand caught in rollers of dough breaks.	407
End of little finger taken off on shaper knife.	408
Head cut and compound fracture of arm; ball for breaking wheels dropped on arm.	409
Three ribs separated from cartilage of breast bone; clothing caught in shafting.	410
First finger broken in two places and other fingers bruised; casting fell on fingers.	411
Two fingers of left hand cut to first joint on saw.	412
Left eye severely injured by fragment of twist drill striking him.	413
Struck in stomach by a hammer coming down on tool he was holding.	414
Right side of head and jaw bruised; tripped on end of plank he was carrying	415
First joint of index finger severed on punch press.	416
Bad cut on forearm from picket butting saw.	417
Thumb ripped open while working on circular saw.	418
Shoulder bruised; clothes caught in countershaft and he was carried around shaft.	419
Fingers cut on shaper.	420
Spine injured slightly; was pulling on a piece of scrap when he slipped.	421
Three fingers lacerated, caught in boring machine.	422
End of index finger cut off while straightening stock.	423
Caught between gate and elevator platform, causing scalp wound; lips bruised and teeth loosened.	424
Piece of wood caught in saw and struck him in the eye, necessitating stitching.	425
Left shin barked and foot badly bruised; a pile of tin toppled on his foot.	426
Bone of wrist broken.	427
End of finger cut off, while taking ring from press.	428
Burned about head and chest by hot bar of iron.	429
*Killed by falling bricks; roof of vault suddenly fell in.	430
Bruised by falling bricks.	431
Ankle sprained; crushed by falling bricks.	432
Ankle sprained; crushed by falling bricks.	433
Elbow of left arm dislocated.	434
*Killed by electric shock.	435
Nail on fourth finger of right hand split; hand slipped under drill.	436
Top of thumb bruised by trip of press.	437
Left thigh bruised; was struck on side by piece of lumber thrown from saw.	438
Two fingers lacerated; caught in gear of condenser.	439
*While oiling machinery overhead, fell, striking a concrete floor, causing instant death.	440
End of right index finger torn off; caught in feed gear wheels of drill.	441
Two fingers on right hand pinched in corner staying machine.	442
Top of second finger crushed while operating Gordon press.	443
Piece of iron fell on foot, breaking bone in large toe.	444
Bad flesh wounds caused by putting on belt on machine.	445
Flesh on shoulder torn; clothing caught in pipe threading machine.	446
Left leg broken; fell from scaffold.	447
End of finger crushed in punch	448
Thumb injured on lathe.	449
Fourth left finger amputated by cable of electric crane and pulley block.	450
First joints of two fingers on left hand cut on groover saw	451
Foot caught between elevator and floor, bruising toes.	452
Foot badly burned; caught under cupola.	453
Struck on right cheek by bolt, causing severe contusion.	454
First finger nail torn off and bone of third finger cracked in planer.	455
Eye ball cut with piece of glass.	456
Right foot burnt by molten iron.	457
Ends of two fingers taken off in gear of matcher.	458
Thumb of left hand cut with rip saw.	459
Three fingers crushed; fingers caught in gear of crane.	460
Arm cut near elbow in milling machine.	461
Thumb slightly injured; came in contact with drill.	462
First finger split on shears while cutting scrap.	463
Finger lacerated; came in contact with water valve.	464
Stepped on a piece of board and nail penetrated foot.	465
A machine which was being moved tipped over and a pinch bar struck him.	466
Foot and leg scalded.	467
Arm cut while operating planer.	468
Fingers of right hand caught between clamp screw and machine head.	469
Chuck fell off post bruising his head.	470
Leg broken by a small timber.	471
While turning discs on power press injured first finger necessitating amputation.	472
Part of thumb and finger of right hand taken off on jointer.	473
Heel crushed while unloading grindstones.	474
Sleeve caught in boring machine pulling arm against it.	475
Bone of right leg fractured; caught in pulley.	476
Gash on side of toe; came in contact with wood-turner's gouge and lathe.	477
Left arm taken off at elbow; clothing caught in cylinder.	478
End of finger pinched and nail taken off in power press.	479
Left side of foot and ankle burned by molten iron.	480
Hand came in contact with saw, two fingers injured.	481
Was stepping on elevator while in motion; foot caught.	482
End of right finger taken off and first and third fingers lacerated by punch press.	483
Left leg broken and thigh bruised; plate fell on him.	484
Left arm injured; came in contact with shearing machine.	485

* Fatal.

LIST OF ACCIDENTS

No.	Date.	Employer.	Place.	Business.	Person injured.	Age.
487	" 6.....	Ontario Iron & Steel Co.....	Toronto	Iron, etc.....	Bert Hubolt	31
488	" 7.....	Canada Cycle and Motor Co.....	West Toronto	Motor vehicles....	Geo. Cook	..
489	" 7.....	Canada Cycle and Motor Co.....	West Toronto	Motor vehicles....	C. Farrance.....	..
490	" 7.....	Telfer Mfg. Co.....	Toronto	Paper boxes.....	(Miss) L. Brown..	20
491	" 8.....	McKinnon Dash & Metal Co.....	St. Catharines....	Harness hardware	Stanley Keeler ..	23
492	" 8.....	McKinnon Dash & Metal Co.....	St. Catharines	Harness hardware	E. Tombling.....	..
493	" 8.....	McKinnon Dash & Metal Co.....	St. Catharines	Harness hardware	C. Freeman.....	..
494	" 9	Toronto-Waterloo Office Fixt. Co.	Waterloo	Office furniture...	J. Lorentz.....	29
495	" 9.....	Staunton's, Limited	Toronto.....	Wall paper.....	Wm. Smith	16
496	" 10.....	Gendron Mfg. Co.....	Toronto.....	Vehicles	Edouard Gauthier	..
497	" 10.....	International Harvester Co.....	Hamilton	Machinery.....	John Gubbins.....	41
498	" 10	Hamilton Steel & Iron Co.....	Hamilton	Foundry	Jas. Quirk	50
499	" 10.....	Hamilton Steel & Iron Co.....	Hamilton	Foundry	W. Lamberton....	29
500	" 11.....	Stratford Chair Co.....	Stratford.....	Chairs, etc.....	R. Allen.....	..
501	" 11.....	Stratford Chair Co.....	Stratford	Chairs, etc.....	P. Quinn.....	..
502	" 12.....	Berlin Interior Hardware Co.	Berlin	Hardware	Harry Hilker.....	..
503	" 12.....	D. S. Perrin & Co.	London	Biscuits.....	Wm. Farmer.....	..
504	" 14.....	Canadian General Electric Co....	Peterboro.....	Electric mach'ry..	A. Merritt	21
505	" 18.....	Ontario Iron & Steel Co.	Toronto.....	Steel castings, etc.	W. McLaughlin...	32
506	" 18.....	Hamilton Steel & Iron Co.....	Hamilton.....	Foundry	Wm. Hall.....	65
507	" 21.....	The Brinton Carpet Co.	Peterboro.....	Carpets	Jack Wheeler.....	..
508	" 21.....	Frost & Wood Co.....	Smith's Falls	Implements..	Alonzo Earle	..
509	" 22.....	William Neilson, Limited.....	Toronto.....	Ice cream.....	Mr. Lister.....	..
510	" 22.....	The Woodstock Lumber & Mfg. Co	Woodstock..... ..	Lumber.....	Geo. Clarkson	66
511	" 15.....	Hamilton Steel & Iron Co.....	Hamilton	Foundry	Albert Riley.....	35
512	" 23.....	Massey-Harris Co.	Toronto.....	Implements..	G. T. Collier	20
513	" 23.....	Geo. Coultis & Son.....	Thedford.....	Saw mill.....	Abram Burch.....	54
514	" 28.....	Hamilton Steel & Iron Co.....	Hamilton	Foundry	P. Costello.. ..	26
515	" 28.....	Hamilton Steel & Iron Co.....	Hamilton	Foundry	Harry Sanker.....	35
516	" 28.....	The Brinton Carpet Co.	Peterboro.....	Carpets	Jack Aspey	..
517	" 28.....	Canadian General Electric Co....	Peterboro.....	Electric machines	Miss Logan	24
518	" 30.....	Sawyer & Massey Co.....	Hamilton	Engines	John Dockings....	45
519	" 31.....	Massey-Harris Co.	Toronto..... ...	Implements	Ross McDonald...	22
520	" 31.....	John Bertram & Sons Co.....	Dundas.....	Machinery.....	Fred. Davey.....	..
521	" 31.....	J. R. Booth	Ottawa.....	Lumber.....	Albert Desarmeau.	21
522	" 17.....	Ontario Iron & Steel Co., Ltd.....	Welland	Foundry	J. McLaughlin ...	32

FOR THE YEAR 1908.—*Concluded.*

Particulars.	No.
Left leg jammed while repairing sand mill.	486
Palm of right hand lacerated; hand caught in machine.	487
Thumb lacerated; caught in machine.	488
Second finger of right hand bruised in staying machine.	489
Face and body burned while pouring a pot of brass.	490
Body burned by pot of brass spilling and striking on cold plate.	491
Body burned by pot of brass spilling on cold plate.	492
Nose smashed and skull fractured by a piece of wood from rip saw.	493
Head cut; struck a revolving gear wheel.	494
Finger on left hand broken and hand crushed; idler belt fell on hand.	495
* Struck on the head by annealing pot, causing death.	496
Head and chest bruised while unloading timber.	497
Head cut; room was filled with steam and struck head against something.	498
Hand hurt in sanding machine.	499
Two fingers of left hand taken off while running shaper.	500
Two centre fingers of left hand taken off on jointer.	501
Hands burned by hot candy.	502
Thumb of left hand crushed between dog and tool.	503
Skull fractured by crane.	504
Nail ran into ball of right foot while walking through mill.	505
Caught in shafting and badly bruised.	506
Hand caught in drop hammer causing amputation of index finger of right hand.	507
Was severely scalded by the bursting of steam jacketted kettles.	508
Thumb of right hand fractured in rip saw.	509
Foot bruised by a small mould falling on it.	510
First finger of right hand slightly wounded in punch.	511
Thumb taken off and index finger lacerated while operating heading saw.	512
Right foot bruised by a heavy bar.	513
Right foot crushed in gear necessitating amputation.	514
Cut wrist on circular blade of machine while tightening shearing machines.	515
Left foot bruised by shop lorry.	516
Thumb crushed between idle gear and spur pinion of engine.	517
Third finger of right hand hurt by binder wheel falling on it.	518
Index finger of right hand badly lacerated between two castings.	519
*While driving a horse and cart up a small bridge, he made horse go over side of bridge and fell about fourteen feet; horse, cart and man went down together. He died next day from injuries.	520
Skull fractured while operating a crane.	521

* Fatal.

BINDING SECT. AUG 2 4 1967